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The New York Times
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Anthropic stole this from me

Charles Graeber

OPINION

We need to talk about a potential A.I. famine.

If we do nothing, starving A.I. chatbots may be left with nothing to eat but their own responses. Think of a photocopy of a photocopy of a photocopy (if you remember photocopies). Quality degrades; mistakes amplify and dominate.

The result is what experts describe as model collapse. Imagine a world where A.I. slop is even worse. It's not a future we want.

I know this because I did my part to head off where we are now.

Kirk Wallace Johnson, Andrea Bartz and I brought a class-action lawsuit against Anthropic. Our complaint was piracy and copyright violation; Anthropic had stolen our books because it needed them to create a commercial product, a generative A.I. chatbot designed specifically to write like us. But they didn't ask us or pay us. That seemed unfair, and illegal.

One day, hopefully, copyright protections will be extended to prevent the unlicensed training of A.I.s.

Piracy is a crime as old as gold — or in the modern digital context, Napster. And intellectual property theft is pretty much baked into the A.I. development story. Most, if not all, A.I. companies built their tech on piracy — though they may call it "fair use."

Anthropic's story offered a twist. While many A.I. companies scraped the internet (including The New York Times, which is why OpenAI, Perplexity and Microsoft are currently being sued by the company for copyright infringement) for material, Anthropic also scanned, digitized and later destroyed physical books through a secret and expensive legal workaround.

If this was Anthropic's legal fig leaf, it worked. The judge found that training the A.I. on physical books that Anthropic purchased was fair use, but illegally downloading and storing millions of copyrighted books, which Anthropic also did, was copyright infringement.

At $1.5 billion, ours was the largest copyright settlement in American history. Nearly half a million works were represented in our class action. After fees and lawyers (who deserve full credit for this case even existing), that works out to about $3,000 per book, which the author has to split with the publisher.

GRAEBER, PAGE 11

The New York Times publishes opinion from a wide range of perspectives in hopes of promoting constructive debate about consequential questions.

Killed by an A.I.-guided drone

PHOTOGRAPHS BY NICOLE TUNG FOR THE NEW YORK TIMES

The grave of Tetiana Bubynets, 19. She was one of three people killed last month in Zaporizhzhia, Ukraine, by a drone that experts say was guided by an experimental A.I. system.

ZAPORIZHZHIA, UKRAINE

Civilian deaths in Ukraine show how Moscow is adapting weapons of war

BY ANDREW E. KRAMER

The young woman ran for her life, but it was too late.

A small Russian drone resembling a model airplane swooped down from the sky last month in the city of Zaporizhzhia in southeastern Ukraine. As it tried to navigate toward a gas station, it crashed into a wall and exploded in a hail of shrapnel, killing Tetiana Bubynets, 19, a university student, and two others.

They were among the thousands of Ukrainian civilians who have died in Russian airstrikes, but the circumstances of their deaths came with an ominous twist. The drone that killed them was guided by an experimental artificial intelligence system, not a human pilot, according to drone experts, Ukrainian military commanders and the forensic team that examined wreckage from the deadly strike and others in the city.

The drone was programmed by human operators to travel toward a particular gas station, but once it got close, it chose its exact target — most likely propane tanks — on its own, based on its training to recognize such tanks and strike them, the experts and military officials said.

A Ukrainian investigator recovering an A.I.-guided Russian drone. Analysis of debris showed that the drones had onboard minicomputers, sold commercially by Nvidia.

It is a development long watched for in the war in Ukraine, presaging a dystopian future in which killer robots roam the skies making life-or-death decisions that reduce targets to data points.

"This is a risk for the whole world," said Col. Serhiy Minaiev, the commander of air defenses in Zaporizhzhia. "In a few years, we will be living in a 'Terminator' movie. It's no joke. Machines are making decisions to strike."

Analysis of debris from this attack and others in Zaporizhzhia found that the drones had onboard minicomputers, sold commercially by Nvidia, that made their targeting decisions, the experts and military officials said.

Nvidia produces a majority of the chips powering the world's most advanced A.I. systems.

The presence of Nvidia modules and the absence of antennas on the drones led Ukrainian air-defense commanders to surmise that the weapons had been guided by an autonomous A.I. system, which was confirmed on further investigation.

Autonomous A.I. systems can be trained on thousands of images to recognize categories like "river," "military truck" or "person." Self-targeting drones use their cameras to hunt for these things with greater precision than a human pilot can provide.

But opponents of such weapons argue that without human intervention, drones may be more prone to mistakes or violations of the laws of war, such as by failing to distinguish innocent civilians from combatants.

The use of self-targeting A.I. in the gas station attack, on July 6, would be the first documented case in which civilian deaths were caused by a Russian drone outfitted with such a system, said Kateryna Bondar, a senior fellow at the Wadhwani AI Center at the Center for Strategic and International Studies in Washington. She added that the Nvidia module was "the best proof" that Russia had been experimenting with autonomous A.I.

While an adviser to President Volodymyr Zelensky has written on so-

UKRAINE, PAGE 4

U.S. needs China's help for new Iran sanctions

NEWS ANALYSIS

Trump's plan to strangle regime's economy has no guarantee of success

BY DAVID E. SANGER

In declaring a new "economic D-Day" for Iran, President Trump and Treasury Secretary Scott Bessent are reaching for yet another strategy to grope their way out of a military adventure gone wrong. Along the way they are reversing the usual approach to coercing adversaries to bend to American will.

Ordinarily, Washington approaches a problem like dismantling Iran's nuclear program with straightforward diplomacy. If that goes nowhere, officials mix in escalating economic sanctions, adding an element of coercion. Military action is a last resort, and only if the president determines that risking American lives is worth the possible benefit.

But Mr. Trump leaped from a brief round of diplomacy straight to bombing runs, meant to force Iran to give up its stockpiles of 11 tons of enriched uranium — including a batch that was nearly bomb-ready — and perhaps collapse the government. The attacks failed at both objectives, at the cost of 18 American lives, hundreds or thousands of Iranians dead, and a price tag that independent analysts put at over $100 billion, though the Pentagon's estimates are lower.

And only now are Mr. Trump and Mr. Bessent trying one more grand experiment, named Operation Economic Outcast, that the White House described as "an unprecedented campaign to sever every remaining economic lifeline sustaining the Islamic Republic of Iran."

The plan is not implausible. As described by Mr. Bessent, it involves choking off every last transaction that funnels money to Tehran, whether they are well-disguised digital transactions, ship-to-ship transfers of oil or the movement of gold around the globe.

"This is a sustained operation to collapse every last option for Iran," Mr. Bessent, who has become the public face of the effort at economic strangulation said at a news conference at the Treasury on Monday.

But the effort raises a series of questions that the White House has not answered. First among them is why, if sanctions as airtight as these are possible, they were not employed before Mr. Trump ordered the U.S. military into battle, exposing shortages of key munitions and the limits of American military power? And now that the military has, in Mr. Bessent's words, "laid the groundwork" for success, what about China — which purchased more than 80 percent of Iran's oil exports last year? Is the administration willing to risk another direct confrontation with Beijing, with which it is already at odds over artificial

SANCTIONS, PAGE 4

Where gig workers are becoming lauded poets

JADE GAO/AGENCE FRANCE-PRESSE — GETTY IMAGES

Hu Anyan with his memoir, "I Deliver Parcels in Beijing," last year. He wrote about his 19 jobs over two decades, including as a package sorter, a security guard and a courier.

Migrant laborers' writings that examine their lives have struck chord in China

BY YAN ZHUANG

A Chinese food delivery driver rushes from gig to gig, measuring time by the number of jobs he completes instead of by the passing of the seasons. He toils in cities across China to send money back to his family, but has been away for so long that his son calls him "that man" instead of "Dad."

These are scenes from the poems of Wang Jibing, a food delivery driver, one of several Chinese poets and authors who have turned their experiences of repetitive factory labor and insecure gig work into art.

This literary genre has ballooned in popularity in recent years, as many Chinese have grown pessimistic about the economy. For a wide swath of society, wages have stagnated, youth unemployment is high and the promise of a better life in return for hard work has faded. Some authors use their writing to call attention to the harsh realities of life for migrant and gig workers, while others celebrate the humanity that flourishes in spite of those conditions. Their styles are often raw and straightforward.

Writers like Hu Anyan, a courier who wrote a best-selling memoir about the jobs he has worked across the gig economy, and Fan Yusu, who left her children behind to work as a live-in nanny in Beijing, have tapped into these themes. They have published essays online that have been shared widely and led to book deals. Some best-sellers have been translated and published overseas.

Last month, Mr. Wang's new poetry collection, "Low Flight," won the Lu Xun Literary Prize, in the highest institutional recognition for the genre yet.

For the Chinese public, curiosity about these workers is intertwined with anxiety about their own prospects. The concern may be particularly pronounced for members of China's middle class. They "pay more attention to these

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PAGE TWO

Migrant workers' literary turns

CHINA, FROM PAGE 1

kinds of narratives because they may represent their future lives," said Zhu Ping, a professor of Chinese studies at the University of California San Diego's literature department.

Gig and factory workers are ubiquitous, yet the hardship and indignities they endure are rarely depicted by China's state-controlled media, which prefers a more positive spin. As the literary work's influence has grown, Chinese officials, wary of the power of workers' grievances to illuminate policy shortcomings or spawn unrest, have increasingly sought to shape it, experts said.

MIGRANT WORKERS' LITERATURE

The genre known as migrant workers' literature mirrors the trajectory of a work force that now numbers more than 400 million people.

Since the 1980s, rural workers have powered China's factories and cities while often being denied the health insurance, unemployment and retirement benefits available to urban residents. The literary movement's early authors wrote essays and poems about their experiences in factories, but as manufacturing jobs have begun to disappear, its new breakout stars are more often doing gig work.

One such star is Mr. Hu, the courier who wrote a best-selling memoir. The book, "I Deliver Parcels in Beijing," was published in 2023 in China, where it was deemed that year's best book by Douban, China's equivalent to Goodreads. It is a diaristic account of the 19 jobs he held over two decades across China, including as a sorter at a logistics company, a security guard, a convenience store worker and a courier.

Mr. Hu's work first came to public attention through an essay he posted online. It detailed his year on the night shift sorting packages at a logistics firm, where the work was grueling and he struggled to get used to sleeping during the day:

I passed by a row of houses on my way in every day. I could smell the cooking going on inside, see the people collapsed on their couches, tired and content after a day's work. That, to me, was what true happiness looked like. Meanwhile I was already more exhausted than those people, and I hadn't even reached the warehouse. I cursed myself in those moments: My damned body cursed my willpower, and my damned willpower cursed it back. I swore I would go right to sleep when I clocked off in the morning. But then the morning came around, and everything went the same as the day before. I was trapped in a loop.

— "I Deliver Parcels in Beijing," translated into English by Jack Hargreaves.

Ding Nan, a 35-year-old teacher in Wuhan, said Mr. Hu's book was the first piece of migrant workers' literature she had read, and she had since sought out more works in the genre.

YIA ZHENG XIAOQIONG

Zheng Xiaoqiong, a magazine editor in Guangzhou, China, rose to prominence in the 2000s for her poems about factory work.

WANG XUZHONG

Wang Jibing, a food delivery driver, won the Lu Xun Literary Prize last month for his "Low Flight" poetry collection.

She said she was drawn to stories of gig workers because of their constant presence in her own life. "They are the strangers we regularly interact with, but I never knew what their lives were like," she said.

Some pieces approach the experience with more hope. In his poetry collection, "Low Flight," Mr. Wang, the delivery driver, celebrates the dignity and resilience of delivery workers:

Who prescribes that with wings spread
one must fly high
Low flight is also a flight
With wind rustling like birds' chirps
And wheels speeding like shooting stars
The meal delivery note attached to a takeout
In clear black and white symbolizes urgency
Like a legal document and a magic incantation

— "Low Flight," translated by Chen Du and Xisheng Chen

Ms. Ding said that migrant workers' stories also changed her preconceptions about the workers. "Society has many stereotypes about them — we think their lives are wretched, that they are oppressed," she said. "But when I read these books, I realized they are also very optimistic."

"Low Flight" won Mr. Wang the Lu Xun prize, which is overseen by a government body and given out once every three years.

But a tension exists between the interests of the Chinese government, which downplays stories of poverty or social inequality, and migrant workers' literature, which lays those realities bare, said Ms. Zhu of the University of California San Diego. She saw Mr. Wang's award as part of the government's effort to shape the genre by elevating a more acceptable voice — one that tended toward hope and optimism, rather than criticism of the system's inherent unfairness.

The Chinese government has said that it wants to foster workers' voices as part of what it describes as "new literature and arts of the masses," stories that have taken off in the online era, unconstrained by the traditional gatekeepers of the publishing industry.

That means more resources and opportunities for writers — but largely for the ones who tell palatable stories, said Maghiel van Crevel, a professor of Chinese literature at Leiden University in the Netherlands who studies migrant workers' literature. Depictions of hardship are acceptable, he said, but linking that hardship to government policy "would be crossing a red line and make it impossible to publish."

But Mr. van Crevel noted that receiving institutional support did not necessarily mean that a writer had "sold out." Mr. Wang's reception by the Chinese establishment "doesn't necessarily make his writing less authentic," he said.

FROM FACTORY TO ADVOCACY

Authors like Zheng Xiaoqiong have continued to speak out about workers' rights even after achieving mainstream success.

Ms. Zheng rose to prominence in China in the 2000s for her poems chronicling the monotony and exhaustion women endured in factories. She described exploitative bosses, workers who suffered from severed fingers or occupational diseases and young women forced into prostitution:

the flowing products and interlocking time are swallowed up quickly
aging ten years flowing past like water
enormous weariness
floats through the mind for many years
she's stuck by
the screws one screw two screws
turning to the left to the right
fixing her dreams and her youth to some product look
at her pale youth running from an inland village
to a factory by the sea all the way to a shelf in America

— "Woman Worker: Youth Pinned to a Station," translated by Eleanor Goodman.

Ms. Zheng has received literary prizes and parlayed her writing into a better life and a magazine career. She has also continued to speak out about the issues facing workers in China and around the world.

"I've always hoped that those in China who have been fortunate enough to achieve upward social mobility can look back and offer a hand to those who are still bogged down, just as they once were," she said in an interview.

"We cannot change reality with poetry," she said, "but we have a responsibility to speak out."

Siyi Zhao contributed research.

As a youth, he said, he lived with wolves

MARCOS RODRÍGUEZ PANTOJA
1946-2026

BY EPHRAT LIVNI

Marcos Rodríguez Pantoja, whose account of growing up in a remote part of Spain, with the companionship of only wolves and other animals, was analyzed in a case study and adapted into literature and film, died this month at 80, according to the authorities in San Cibrao das Viñas, the municipality where he spent his final years.

Mr. Rodríguez's story came to light in the mid-1970s, about a decade after he had made what he described as an unwilling return to human society. Gabriel Janer Manila, a writer, heard about the case from a friend and wanted to learn more.

"At first, it seemed like a fabrication. It couldn't be true," Mr. Janer said in a 2010 interview with the site Anika Entre Libros.

But he came to believe the tale, finding corroboration for Mr. Rodríguez's claims from witnesses and other research. Mr. Janer would go on to write a study about Mr. Rodríguez's childhood and, later, a novel called "I Played With Wolves," originally published in 2009.

The story also inspired a 2010 film directed by Gerardo Oliveras, "Among Wolves," in which Mr. Rodríguez appeared.

Mr. Rodríguez faced doubts over the years, but his story fascinated many. Mr. Janer became convinced after visiting places Mr. Rodríguez said he had been and meeting people — including a seminarian who had cared for him — who backed up the story and spoke of Mr. Rodríguez's complete lack of social knowhow.

In Rante, a village in San Cibrao das Viñas, in northwest Spain, where Mr. Rodríguez lived for the last quarter-century of his life, some people told Germany's public broadcaster around the time the film was released that they had doubted his story until it was made into a movie — and some said they continued to be dubious. In 2010, a team from Spain's public broadcaster traveled with Mr. Rodríguez to the place where he said he had lived, filming him showing some of his survival skills, like catching fish using rocks, and his deep familiarity with nature, including mimicking bird calls.

In any case, he eventually came to be known as the "wolf boy of Sierra Morena" and stuck to the story over the decades.

Claims of having grown up in the wild are widely viewed with skepticism, and expertise in the subject is rare. There have been some notable cases, though they are few. Feral children also appeared in ancient myths and medieval folk tales, fueling a real-life fascination with them.

In 1726, Caroline, the Princess of Wales, sought the guardianship of a youth found in the woods in Germany who became known as Peter the Wild Boy and was a source of wonder in Europe. She installed him in her house in London under the watch of a doctor, then put him in the care of a servant when he proved unruly. The so-called Wild Boy of Aveyron was found in France at the end of the 18th century and was taken to a physician in Paris who tried and failed to teach him society's ways.

Such tales have intrigued people because they say as much about society as they do about the children said to have lived outside of it. "Through the stories, factual and fictional, of the feral children, there emerges, perhaps, another narrative: the fragmented and haunting story of our continuing relationship with the savage image of ourselves," the cultural historian Michael Newton wrote in his 2002 book, "Savage Girls and Wild Boys: A History of Feral Children."

As Mr. Rodríguez told it, he was born into a poor family in southern Spain in June 1946. His mother died when he was very young, and the woman his father later married was an abusive stepmother. The family lived in a remote alpine hut in the Sierra Morena mountain range, turning firewood into charcoal. When he was about 7, he said, he was put in the care of an old goatherd, to be trained to replace him.

"He takes Marcos in and teaches him how to survive, how to care for the flock of goats, how to do everything that might help him," Mr. Janer said in the 2010 interview.

The old man then died or disappeared, and young Marcos began to fend for himself, unwilling or unable to return to his former home.

He described his return to life among humans as something he did not know how to manage and would never fully embrace.

Mr. Rodríguez said he lived in the wild for about 11 years with the help of wolves and other animals. In 1965, he was discovered by law enforcement authorities among wolves, wearing animal skins.

He described his return to life among humans as something he did not know how to manage and would never fully embrace. According to Mr. Rodríguez's interviews and Mr. Janer's study, his rehabilitation was undertaken by nuns. He said he had lost the habits of walking upright and of using human speech, and he had forgotten how to behave with people.

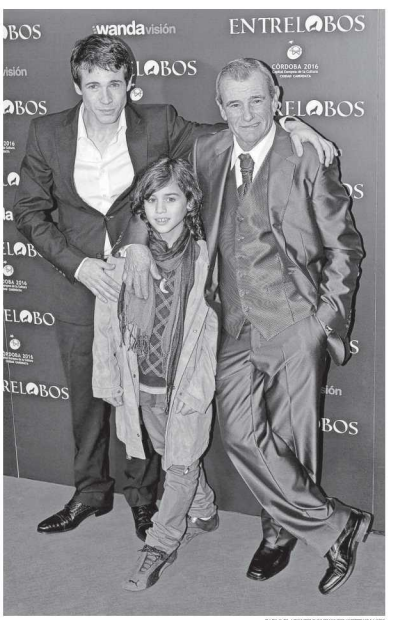
Mr. Rodríguez said he struggled with human society for much of his life. Employers had taken advantage of him over the years, people had mocked him and he had been happiest among the animals, he said in interviews.

In Rante, he worked with Amigas das Árbores, an environmental group, speaking to children at schools about his youth and his unique experience with animals.

The group, in a post on social media earlier this month, said that one of his final wishes had been "for his ashes to remain in the village that took him in."

In an interview with the newspaper El País in 2018, Mr. Rodríguez said that despite his disappointment with humanity, he had no chance of returning to a life in the mountains. The area where he had once lived now featured cottages connected to the electric grid, and the wolves were strangers.

"If I call out to them they are going to respond, but they are not going to approach me," he said. "I smell like people."



PABLO BLAZQUEZ DOMINGUEZ/GETTY IMAGES

Marcos Rodríguez Pantoja, right, in 2010 at the premiere of "Among Wolves," with Juan José Ballesta, left, and Manuel Camacho, the actors who played him at different ages.

A rush to become Japan's second city

TOKYO

Designation established to ensure continuity in case of an emergency

BY JAVIER C. HERNÁNDEZ AND HISAKO UENO

For 158 years, Tokyo has stood as Japan's glittering capital, a world-famous nexus of food, culture, business and government.

But Tokyo might soon get an understudy. Japan's legislature recently passed a bill to create a secondary capital that would serve as an alternate center for the government's operations, ensuring continuity in the case of a natural disaster or other emergency.

With hundreds of millions of dollars potentially in the offing, and the chance for tax breaks, tourism and urban revival, the plan has set off a frenzy in Japan. Thirteen local governments have already entered the race, including the business hub of Osaka, the southern prefecture of Fukuoka and the northern island of Hokkaido. Even the laid-back, mountainous region of Gunma, home to about 1.9 million people, has thrown its hat into the ring.

Mayors and governors have held flashy news conferences to declare their interest. Osaka has even created a mascot for its bid, a talking "welcoming cat" named Nyaniwa Fukumaru.

Masashi Kawai, a senior policy officer at the Tokyo Foundation, a think tank, said the competition had the feel of a grand festival: "A 'don't-miss-the-Gold-Rush' mentality has taken hold."

The idea has divided Japanese citizens. Supporters of the plan say that Japan, long prone to earthquakes, typhoons and floods, must be prepared for the possibility that its government offices in Tokyo could become debilitated. Opponents say the idea is a misguided proposal meant to reward allies of Prime Minister Sanae Takaichi: One of her closest political partners is the Japan Innovation Party, which has worked for years to establish its home base of Osaka as an alternate capital.

HIROKO MASUIKE/THE NEW YORK TIMES

THE NEW YORK TIMES

Osaka is one of the cities vying to become Japan's second capital, a plan that proponents say would keep the government running if a natural disaster hit Tokyo.

It will be up to Ms. Takaichi to crown the winner. No official timeline has been set, but her cabinet is expected to put together a list of requirements for the secondary capital in the next few months.

GUARDING AGAINST DISASTER

The idea of a second capital has some precedent in Japanese history. During the Edo period, from 1603 to 1868, Japan had two capitals. Edo, which later became Tokyo, was a political and administrative capital where the shogun ruled. Kyoto was the cultural and spiritual capital, home to the emperor.

In recent decades, the threat posed by natural disasters has led some experts and politicians to revive the idea. Japan is situated along the Pacific "Ring of Fire," a chain of seismologically active faults encircling the Pacific Ocean. Experts have warned about the possibility of a so-called megaquake in Tokyo and other large cities.

In 2011, a 9.1-magnitude megaquake and tsunami in northeastern Japan killed more than 19,000 people and triggered a nuclear disaster. The quake was a reminder of the vulnerability of Tokyo, which lies about 230 miles (370 kilometers) southwest from the epicenter.

Designating another capital could also help decentralize Japan's population and drive economic growth outside the capital. Many people have left rural areas in recent years for jobs and schooling in Tokyo. While the countryside is hollowing out, the population of the Tokyo metropolitan area has grown, rising slightly to 37 million last year.

CONCERNS ABOUT COSTS

Experts agree about the threat that natural disasters could pose to Tokyo's government. But some critics say the plan would do little to address those risks.

Nobuo Sasaki, a professor emeritus at Tokyo's Chuo University and a former Tokyo official, said the legislation failed to account for important factors like the stability of the ground in the prospective cities.

"It remains entirely unclear what exactly constitutes a 'secondary capital' or how it should be developed," he said.

Opposition lawmakers argue that Osaka, a top contender, is not suitable to serve as an alternate, given its own vulnerability to earthquakes. They have also expressed concern about the costs of building backup structures to house government offices.

Makiko Kishi, a lawmaker for the Constitutional Democratic Party of Japan, said the proposal was "half-baked" and "tainted by partisan maneuvering and the pursuit of vested interests."

Some experts argue that Japan should focus instead on fortifying Tokyo's own defenses against earthquakes and other threats. They say that designating a backup capital could also exacerbate problems in rural Japan, causing millions to flee the countryside for another megacity.

THE RACE TO BE SECOND

Despite the conflicting views, local leaders across Japan have rushed in recent weeks to explain why their regions should be chosen.

In the city of Nagoya, Mayor Ichiro Hirosawa skipped a planned dance festival last month to hold a news conference promoting his city.

He has said the city plans to play up its manufacturing prowess and to "do everything in our power to capture the country."

Officials in the northern prefecture of Hokkaido and its capital, Sapporo City, have set up teams to focus on securing second-capital status. They have emphasized their region's distance from Nankai Trough, a seismically active zone off southern Japan.

Mr. Kawai, the policy expert, said it would be hard to replicate Tokyo's success. Regions should instead focus on coming up with creative ways to promote economic growth, he said, to offset the declining population.

"Without that approach," he said, "the secondary-capital initiative will bring 100 harms and not one good."

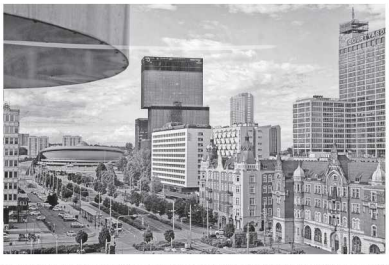
World

The mystery of the missing crypto bosses

KATOWICE, POLAND

Disappearances in Europe have worried investors and puzzled investigators

BY ANDREW HIGGINS



PHOTOGRAPHS BY MACIEK NABRDALIK FOR THE NEW YORK TIMES

Top, a "Zondacrypto Arena" sign at a since-renamed stadium in Czestochowa, Poland. Above right, Nicole Suszek showing a missing person poster on her phone of her brother, Sylwester Suszek, who founded Zondacrypto in Katowice, Poland, above left, in 2014. The company initially appeared to be successful and Mr. Suszek was hailed as a "crypto king."

The voice message was desperate.

Left on the phone of a Polish woman in 2022, it was from her older brother, Sylwester Suszek, the founder of Eastern and Central Europe's biggest cryptocurrency exchange. He had disappeared two weeks earlier from the fuel depot in southwest Poland where he kept his helicopter.

"If you don't help me, we will never see each other again," he said, begging his sister to send Bitcoins to secure his release. Mr. Suszek has not been heard from since, and his family believes he was probably killed.

That largely forgotten mystery has now surged back to life. In April, the Polish lawyer who replaced Mr. Suszek at the helm of the exchange, Zondacrypto, also vanished.

"One crypto boss disappearing is bad enough, but two in four years is crazy bad," said Robert Nogacki, a lawyer in Warsaw who represents Zondacrypto customers locked out of their accounts.

The global cryptocurrency industry has made big strides toward mainstream acceptance in recent years. But it is still struggling to shake off the taint of multiple catastrophic failures, like the 2022 collapse of Sam Bankman-Fried's FTX exchange, and its reputation as a magnet for criminals looking for ways to launder ill-gotten gains.

The saga of Zondacrypto, which Poland's prime minister, Donald Tusk, has accused of having ties to Russian intelligence, organized crime and right-wing politicians, helps explain why.

Zondacrypto's website went dark in April, leaving hundreds of thousands of clients with no way to withdraw money or make trades on the exchange, an online marketplace for buying and selling digital currencies using real money or crypto. A digital token issued by Zondacrypto, the ZND, has lost more than 99.9 percent of its value.

Przemyslaw Kral, who replaced Mr. Suszek as chief executive, was last heard from on April 16, when he released a video on social media pleading with worried customers not to lose faith. He promised they would get their money back, thanks to what he claimed were Zondacrypto's holdings of Bitcoins worth more than $330 million.

Getting access to that, Mr. Kral conceded, might take time. Only one person, he said, knew the digital codes needed to unlock the online vault holding the treasure: Mr. Suszek, the former boss who went missing in 2022.

"Please give me a little more time," Mr. Kral beseeched his customers.

BECOMING A "CRYPTO KING"

Zondacrypto began life in 2014 under the name BitBay, operating from Katowice, a city in Poland's coal-mining region that was becoming a vibrant economic hub, powered by tech and business services companies.

Mr. Suszek, BitBay's founder, was the son of a miner, lavished with praise in the Polish media as a "crypto king" with a rags-to-riches story.

Mr. Suszek divided his time between a family home in Katowice and Warsaw, where he had a luxury apartment. He flew between the two cities in a helicopter he piloted himself, and he owned a fleet of expensive cars, including Porsches and a Ferrari.

"He was very flashy and liked showing off his success," recalled Karolina Wysota, a Polish journalist who interviewed him before he disappeared. She added that "he really believed in crypto and told me he was saving Bitcoins to leave for his children."

But that same year, Polish regulators began questioning the company's affairs, and Mr. Suszek started looking for a new base. He tried Malta and, after that failed, Estonia. By October 2020, he had registered the company as BB Trade Estonia, joining a stampede by hundreds of other crypto ventures to the Baltic country.

The honeymoon did not last long.

OPEN FOR BUSINESS

In 2022, Estonian officials started having second thoughts about the country's growing role as a crypto hub.

A report that year by the Estonian Financial Intelligence Unit, the agency that then supervised companies dealing in virtual assets, told of flagrant disregard for measures meant to prevent money laundering. According to the agency, nearly three-quarters of the companies "did not send a single report about suspicious transactions" in 2021.

Mr. Suszek's BitBay — by this time rebranded as Zondacrypto, with BB Trade as its parent — was among the companies that never reported a suspicious transaction. It was based in a shabby business district outside Estonia's capital, Tallinn, in a small second-floor office above a kitchenware store and next to a nail salon.

On a recent visit to the building, Zondacrypto's mailbox in the lobby was overflowing with letters dating back months. Several employees of the nail salon said they had never seen anyone go into the office.

Around the time the exchange was shifting its registration to Estonia, Mr. Suszek's sister, Nicole Suszek, started noticing a change in her brother.

He grew increasingly anxious and fearful for his safety, she said in an interview in Katowice. The trigger seemed to be when an unidentified person smashed the windshield of his blue Ferrari in Katowice with an ax.

Before he also disappeared, Zondacrypto's second boss had reassured clients who were concerned about payment delays.

Ms. Suszek said her brother had blamed an early partner in the crypto business who was also the godfather to one of his two children — and who, he believed, was entangled with Katowice criminals.

After the ax episode, he moved for a time with his family to Zurich. But his wife was unhappy there, and they soon returned to Poland.

Then, in March 2022, he vanished.

He had used two mobile phones; their last signals were from a fuel depot and gas station in Czeladz, a small town near Katowice. Police investigators later discovered he had driven there in his Porsche Taycan for a meeting with a close friend and business associate, Marian Wszolek, known as "Maniek," who ran the fuel depot.

Polish prosecutors last year charged Mr. Wszolek with membership in an organized crime group, large-scale value-added-tax fraud and money laundering. He was also charged with "unlawful deprivation of liberty" in connection with Mr. Suszek's disappearance.

After the charges were filed, Mr. Wszolek also vanished.

One of the last messages purportedly sent by Mr. Suszek in 2022, an email to his sister, read: "They are treating me worse and worse. They are now threatening to cut off my fingers." It added that "they only want to get back what I owe them."

A separate message, apparently sent by the abductors, said Mr. Suszek was "crying like a little girl." Another warned that his family would "live a life of fear" if they didn't pay up. "The clock is ticking," that message warned.

CLIENTS PANIC

Soon after Mr. Suszek vanished, Mr. Kral, his lawyer and trusted deputy, who lived in Monaco, took control of the business. He began to splurge on marketing, despite questions from auditors in Estonia about whether the exchange really had the assets that its parent company said it did, in financial statements filed in 2023 and 2024.

Unfazed, Zondacrypto sponsored major soccer clubs in Poland, Italy and Estonia, the Polish Olympic Committee and various foundations tied to Polish politicians, particularly nationalists and libertarians.

When Polish clients started complaining in December about delays in payment, Mr. Kral put on a brave face. In January, he appeared at the World Economic Forum in Davos, where the exchange sponsored the local ice hockey team, and boasted that crypto was becoming "more and more mainstream."

In the spring, as customer complaints grew more insistent, Mr. Kral said payment delays were due to an upgrade of the exchange's website. He assured clients that they would get their money within a few days. But the deadline kept slipping back, and Mr. Kral began threatening journalists if they questioned his story.

Szymon Jadczak, an investigative reporter with Wirtualna Polska, a respected online news outlet, who was digging into Zondacrypto's troubles, said he had been unnerved when he received a message from Mr. Kral that mentioned the journalist's private medical history, including a brain hematoma. "He told me to be careful," Mr. Jadczak recalled in an interview in Warsaw.

By April, client concerns had grown into full-blown panic as the exchange froze all withdrawals.

Desperate to halt the rush for the exit, Mr. Kral told clients not to worry. He said Zondacrypto had 4,500 Bitcoins in reserve but he needed time to access them, since only Mr. Suszek, his missing predecessor, had their digital key.

His story immediately struck crypto experts as fishy because the locked "wallet" that Mr. Kral identified as containing the company's Bitcoins had been inactive for nearly a decade.

On June 29, two months after Zondacrypto's website shut down, the Estonian Financial Intelligence Unit revoked the license of its parent company.

Zondacrypto has been the subject of speculation in both Poland's Parliament and its news media over whether it was a legitimate company simply upended by bad bets on crypto, or a criminal enterprise that had been set up to launder money. Bitcoin has lost half its value since its last year. Prosecutors in Katowice have opened an investigation into the "circumstances surrounding the establishment and operation" of Zondacrypto.

Perhaps the one person who could provide answers is Mr. Kral, who has not been seen in four months.

There have been several unconfirmed sightings of him, in Israel, Botswana and the United Arab Emirates. Mr. Nogacki, the lawyer representing the exchanges's clients, said Mr. Kral was probably in Southeast Asia.

But, he said, he was sure of only one thing about Zondacrypto: "It was a fraud from the first day."

Anatol Magdziarz contributed reporting.

Gripped by El Niño, Indonesia battles intensifying wildfires

BY MAX KIM
AND MUKTITA SUHARTONO

The wildfires have been burning in the peatlands for weeks, belching acrid smoke over West Kalimantan Province in Indonesian Borneo. In the capital, Pontianak, everyone in Alfian Effendi's family has developed coughs.

The thick haze, which has also drifted into Malaysia, has forced schools in the area to temporarily suspend classes, including those for Mr. Alfian's four children, whose noses have been running from the smoke. Local officials have distributed masks and urged people to stay indoors. But that is a luxury that Mr. Alfian, 37, the owner of a chicken slaughterhouse, does not have.

"We all have to work to earn a living, right?" he said in a phone interview. "We know we are risking our health, but what choice do we have?"

Wildfires are a seasonal occurrence in many parts of Indonesia, a vast archipelagic country, so this trade-off is nothing new for Mr. Alfian. But there is reason to fear that this year may be especially bad, according to experts. Indonesia is in the grip of a "super" El Niño that will most likely suppress the rains that would otherwise extinguish the fires.

And the fire season has yet to peak.

"The question now is whether the current acceleration continues through September and October and first two weeks of November," said David Gaveau, a landscape ecologist and the founder of Nusantara Atlas, a website that tracks fires and deforestation in the region. "New mega fires may appear in southern Sumatra in September," he added, referring to Indonesia's third-largest island.

As of last Thursday, there were more than 224,000 hot spots suggesting fire activity across Indonesia, according to Nusantara Atlas's satellite data. Mr. Gaveau said that this was an unusually high number that resembled the trend in 2019, which brought one of Indonesia's worst fire seasons, when as much as 7.7 million acres (3.1 million hectares) of land burned, he said. Last month alone, about 230,000 acres of land burned, roughly equal to the total area affected between January and June, based on data from Indonesia's forest ministry.

Many of Indonesia's most devastating fire seasons have developed during strong El Niño events, when the warming of the central Pacific Ocean shifts rain patterns, drenching some areas while drying out others.

In 2015, another El Niño year, the government said about 6.4 million acres burned, sending smoke beyond Indonesia's borders.

A study by researchers from Harvard and Columbia universities in the United States later estimated that the haze from the fires had contributed to around 100,000 premature deaths across Indonesia, Malaysia and Singapore.

WAHYUDI/AGENCE FRANCE-PRESSE — GETTY IMAGES

A security officer fighting a fire on peatland in Sumatra, Indonesia.

Climate experts have noted that this year's El Niño may end up being the strongest in recorded history, according to some estimates.

Mr. Alfian said that he could already sense its effects in Pontianak, where the earth has been so hot and dry that it felt as if even an errant spark could explode into flames, he said, and where the local river has become so depleted that seawater has rushed in, making the tap water salty. "We can only use it for baths now," he said. "For cooking or washing our vegetables, we have to buy extra gallons of water."

Though El Niño has historically been a major accelerant for fires, experts point to the widespread degradation of Indonesia's peatlands as the underlying reason for the country's growing fire risk over the past few decades.

In their natural state, peatlands, a type of spongy wetland that makes up around 10 percent of the country's total land mass, are resistant to fire because they are composed of waterlogged decaying organic matter. But decades of industrialized agriculture have led to the mass draining of them.

"The exposed, dry peat becomes combustible fuel," said Resti Salmayenti, a tropical peatland researcher at the University of Leeds in England. "And once ignited, fires can spread below the surface, where they're hard to detect and can burn for a long time during prolonged drought, like during El Niño."

In addition to harming respiratory health, those fires also produce disproportionately large greenhouse emissions because peatland stores far more carbon than forests.

Though Indonesian law requires companies operating within significant peatlands to keep them wet, Bambang Saharjo, a forest fire forensics expert at IPB University in Bogor, West Java, said that those rules were often ignored, while broader peatland restoration efforts, like using canal blocks to trap water, had also stalled.

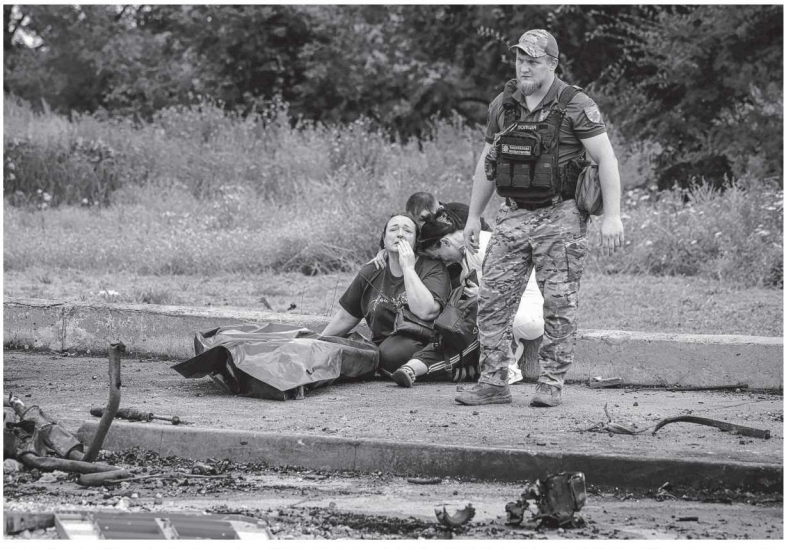
"Many canal blocks and boreholes have fallen into disrepair, rendering them ineffective for fire suppression and leading to an escalation of increasingly massive fires," he said.

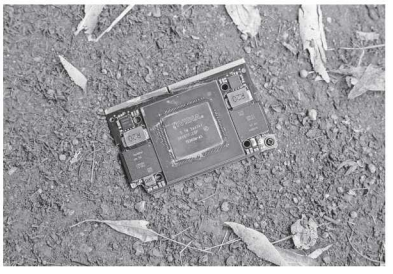
In nearly all cases, he added, human activity was responsible for causing the damaged peatland to catch fire.

The Indonesian authorities have so far arrested more than 70 people and launched investigations into at least four companies in connection with the fires.

"We know we are risking our health, but what choice do we have?"

WORLD





PHOTOGRAPHS BY NICOLE TUNG FOR THE NEW YORK TIMES

Clockwise from above left: mourning after three people were killed by a Russian drone strike in Zaporizhzhia, Ukraine, last month; a Nvidia Jetson Orin computer module used in the drones; and anti-drone netting hanging over a main road in Zaporizhzhia.

An A.I.-guided drone kills civilians in Ukraine

UKRAINE, FROM PAGE 1

cial media that Russia was testing self-targeting A.I. systems, fatalities have not been previously reported, nor have the details of the Nvidia Jetson Orin computer module that was used.

Both Russia and Ukraine had already been using A.I. in multiple drone models before the fully autonomous drones emerged.

In those earlier models, A.I. is used only for what is known as the "last mile" — the final stage of the attack, after a remote human pilot has selected the target. Fully autonomous A.I. removes humans from the final target selection.

The Nvidia chip in the Zaporizhzhia attack was not encrypted, Ukrainian officials said, so they could see the terrain images that had been uploaded to the module, enabling the drone to track visual landmarks and stay on course. They were also able to examine coding, they said, which revealed what types of targets the drone had been trained to recognize and attack, like propane tanks.

Earlier drone models are generally either piloted by human operators, through radio transmissions or fiber-optic cables, or they are preprogrammed with coordinates. As drones have taken over the battlefield in Ukraine, their pilots have become prime targets.

An autonomous A.I.-guided drone, by contrast, requires no human pilots and can be more accurate than a munition programmed to hit coordinates.

Local air-defense officials say that Russia has been aiming for civilian objects like pumps or propane tanks at gas stations, along with military recruitment centers, in trying out autonomous drones in Zaporizhzhia. It is not clear why these targets were chosen.

Vadym Kushnikov, a drone expert at the Kharkiv Aviation Institute in Ukraine, said the drone that killed the three civilians was "a preprogrammed tool trained in virtual reality to track specific objects."

While traditional software follows step-by-step rules written by a person, an A.I. system derives its own rules by finding patterns across enormous amounts of data, a process called machine learning. That allows it to manage unexpected situations. It also means no one can fully predict what it might do.

Rights groups and the International Red Cross vehemently oppose the use of A.I. weapons without humans in the loop. Such groups say that autonomous systems essentially leave robots to interpret international law in determining legitimate targets in war.

But some experts argue that in the future, weapons should in fact be required to have A.I. systems. These weapons are safer, the argument goes, because they are able to make decisions before striking, even if not always perfectly, unlike unguided aerial bombs or ordinary artillery shells that fall without seeing what they will hit.

The weapon in the fatal strike was flying in a group of about half a dozen drones, according to the regional military governor, the city's air-defense commander and an air-defense team on duty that day. None were emitting radio signals, and they had other characteristics associated with Russia's autonomous A.I. tests, including being launched in a wave, the officials said.

"In a few years, we will be living in a 'Terminator' movie. It's no joke. Machines are making decisions to strike."

While some of the A.I.-guided drones tested by Russia have detonated on impact, others have not and have remained intact, Ukrainian officials said. They showed debris from two such drones to reporters for The New York Times. The Times photographed the Nvidia computer module inside the drones and sent the images to the company.

Nvidia confirmed that the photos showed a Jetson Orin minicomputer. Such modules, which cost only a few hundred dollars, have been found on several types of Russian weapons.

In a statement, the company said that the minicomputer was a consumer-grade product "sold to students, developers and start-ups for a wide range of beneficial applications." Nvidia sells the computer in many countries but not in Russia. It is, though, widely available through resellers, the statement said.

Ukraine, too, has tested self-targeting A.I. systems. Mykhailo Fedorov, the defense minister who was recently ousted, said in an interview with The Times late last month that Ukraine had tested an entirely autonomous A.I. system in Russian-occupied Crimea over the past several months. Mr. Fedorov said that the devices had targeted fuel storage sites and military equipment and that no civilians had been killed.

While the drones in the Zaporizhzhia attack had no antennas to send back data on the tests, Russian forces often fly reconnaissance drones that can record strikes. The city is also believed to harbor Russian spies who report battlefield damage assessments.

The absence of an antenna would not by itself prove that a drone was self-targeting. It could be preprogrammed to fly a route, with computer algorithms like those used for decades in auto-piloting systems for aircraft. But that drone would not need an Nvidia chip.

Russia began test flights of A.I.-guided Molniya drones — a mass-produced fixed-wing model — in May, and started testing self-targeting systems in the V2U, another fixed-wing drone, several months before that, Ukrainian air-defense experts said. Some of the V2U tests were only for "last mile" targeting.

In interviews, some residents of Zaporizhzhia, which is just nine miles (14 kilometers) from the front, said that the thought of devices buzzing over the city, making their own decisions to kill, brought chills. But Ukrainian cities have been so heavily bombarded for years that life has already been reshaped by less sophisticated drones.

Interceptor drones, piloted (for now) by men and women who are local heroes, are one answer to the drone threat. Anti-drone nets are another, covering about 240 miles of roads in and around Zaporizhzhia.

Another defensive measure is camouflage. Plastic sheeting, for example, is propped at odd angles around propane tanks at gas stations, in an effort to fool A.I. image recognition systems.

Moments before the exploding drone barreled toward the gas station on July 6, a group of people huddled by the wall of a nearby apartment building for safety, having already heard blasts as the drones came in waves.

Oksana Ishenko, a station attendant, stood beside Ms. Bubynets. "She was crying from fear," Ms. Ishenko recalled.

Then some in the group started to shout, "A plane! A plane!" Ms. Ishenko said. A drone was heading their way. Ms. Bubynets and several others bolted, fanning out in a parking lot. After the drone failed to make its way around the apartment building, it detonated before reaching its target.

Ms. Bubynets, who had been studying accounting at Zaporizhzhia National University, lay on the pavement, unmoving, with blood flowing from her nose. She was declared dead at a hospital, said Tetiana Melikhova, one of her professors. The two others killed, Oleksiy Sviriin, 41, and Roman Karpiy, 48, died later of their wounds.

"They are training the technology," Colonel Minaiev, the city's air-defense commander, said of the Russians. A.I. is good but not yet perfect, he added.

"They are looking for mistakes and will fix them," he said.

Evelina Riabenko, Stanislav Kozliuk and Paul Mozur contributed reporting.

Trump will need China's help to impose new sanctions on Iran

SANCTIONS, FROM PAGE 1

intelligence, Taiwan, a rapid nuclear expansion and a huge production overhang that threatens the global economy?

The original D-Day, on the shores of Normandy, did not require Chinese participation. This economic D-Day does, and there is no indication so far that it is forthcoming, a month before President Xi Jinping is scheduled to arrive in Washington for his first state visit in more than a decade.

"This will be tricky," Peter Harrell, a visiting scholar at Georgetown Law School in Washington who has written extensively on the limits of economic sanctions, said on Monday.

Earlier this year, in deciding how to bring Iran to its knees, Mr. Trump "had a choice to really come down hard on the Chinese, which he didn't want to do because of his own economic agenda with Xi, or put the naval blockade on the Iranian tankers," Mr. Harrell noted.

"It turned out it was politically easier to put the blockade on all the Iranian tanks than to tell the Chinese, 'We will sanction your big companies' if they continued their trade with Iran."

It is still a delicate issue.

Mr. Bessent threatened to impose what are called "secondary sanctions" on all nations that continued to do business with Iran.

But in an opinion article for The Financial Times over the weekend and at his news conference on Monday, Mr. Bessent never uttered the word "China." He was going out of his way to avoid angering the world's second-largest economy and the one nation that may well determine whether this new White House strategy has a chance.

Of course, there is nothing new in trying to make Iran an economic outcast. The first serious efforts to impose sanctions on Iran for its nuclear program date back to the George W. Bush administration. When the Obama administration was trying to push Iran into negotiations in 2009, the secretary of state at the time, Hillary Rodham Clinton, promised "crippling sanctions" unless the country entered negotiations.

ARASH KHAMOOSHI/POLARIS FOR THE NEW YORK TIMES

It took years to generate results, but many experts contend that the escalating sanctions that followed helped compel Iran to agree to the 2015 nuclear accord, sharply limiting its nuclear work in return for a lifting of financial and oil sanctions. Mr. Trump ripped up that agreement in 2018, declaring it deeply flawed.

At that time, he began reimposing sanctions, and he and his secretary of state, Mike Pompeo, predicted that the economic pressure would be too much for Iran's leaders to take.

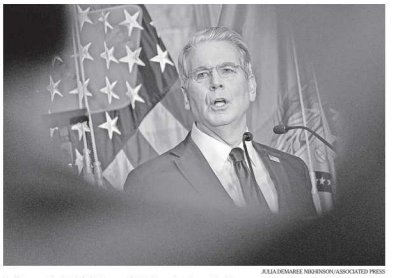
"The Trump administration is pursuing a 'maximum pressure' campaign designed to choke off revenues that the regime — and particularly the Islamic Revolutionary Guard Corps, part of Iran's military that is directly beholden to the Supreme Leader — uses to fund violence," Mr. Pompeo wrote in Foreign Affairs in late 2018. "Yet President Trump does not want another long-term U.S. military engagement in the Middle East."

Ordinarily, Washington tries diplomacy, sanctions and an element of coercion before resorting to military action.

Mr. Pompeo, now estranged from Mr. Trump, sounded many of the themes repeated by Mr. Bessent on Monday. The exception is that the United States is now committed to a military presence off Iran's coast for an indeterminate amount of time, but certainly as long as Iran threatens shipping through the Strait of Hormuz.

The record of these past sanctions is unimpressive: Iran kept shipping two million to three million barrels of oil a day despite them. Those numbers have now come down to a trickle, thanks to the naval blockade now in place.

But the nuclear material has not moved out of its rubble-covered storage sites since the United States bombed those areas in June last year, satellite photographs indicate. And the government survives, though under different management after Ayatollah Ali Khamenei was killed in the opening strikes of the war in February. His son, considered more of a hard-liner, now holds the post, even though he has not been seen or heard from directly.



JULIA DEMAREE NIKHINSON/ASSOCIATED PRESS

Left, near the Tajrish Bazaar in Tehran last month. Treasury Secretary Scott Bessent, above, has threatened to impose "secondary sanctions" on all nations that continue to do business with Iran. This would affect China, which is a major buyer of Iranian oil.

As a result, one of the more curious elements of Mr. Bessent's speech on Monday came when he returned to a promise made by Mr. Trump nearly six months ago: that he would establish the conditions for regime change.

At the time, Mr. Trump thought the military battle would last a few days or weeks, before Iran offered what the president called "unconditional surrender." He urged the Iranian people to rise up and take over their government after the smoke of the American bombing cleared. Mr. Trump soon abandoned that effort, acknowledging in an interview with The New York Times in June that the Iranian people simply did not have the guns or organization to make that happen.

Mr. Bessent tried a slightly different approach on Monday. "To the ordinary soldiers supporting this regime," Mr. Bessent said, "as more and more of your paychecks stop or are supposedly just delayed, ask whether your commanders are leading your country to triumph or to ruin, and recall that the Berlin Wall fell when ordinary soldiers decided not to shoot at their own people."

Of course, the circumstances when the wall fell were entirely different than they are in Iran. There was no external, active war going on, just the accelerating pressure of the Cold War. And the Soviet Union and its satellites saw little hope in putting down the local uprisings, including the one in East Germany that led to Mr. Bessent's historical analogy.

Yet that is Mr. Trump's big bet right now. His decision in February to forgo the kind of sanctions announced on Monday, and to move right to military force, was in some ways an acknowledgment that economic sanctions move slowly, and that history suggests they often fail to work.

Today, he is back to that plan, for the absence of many other viable choices.

U.S. farmers struggle to get basic services

WASHINGTON

Lower government staffing has led to problems with loans and infrastructure

BY LINDA QIU

NINA RIGGIO FOR THE NEW YORK TIMES

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Mary and Zachariah Ben, top, turned to private lenders when the loan they sought from the administration stalled. Above left, Amanda Butterfield, who said staffing turnover had led to federal agency errors. Above center and right, Emilia Barraza and Lorenzo Alba Jr., who are waiting for $300,000 in federal funding for a New Mexico food pantry.

Mary and Zachariah Ben, farmers in New Mexico, believed they were on the verge of buying the property of their dreams last fall: 47 acres, with enough cropland to grow heirloom corn and a processing facility to expand their organic baby food business.

But the low-interest loan they secured from the Agriculture Department to make the purchase of the 19 hectares in Aztec, N.M., was on hold for months, first during the government shutdown that lasted until mid-November and then as federal workers left the agency in droves. Only half a dozen loan specialists who could help process their claims remained in the entire state, the couple learned, leaving them in limbo indefinitely and the seller impatient to know whether the agreement would ever go through.

Zachariah Ben, who along with his children is a member of the Navajo Nation, ultimately turned to private lenders instead, and the family absorbed more than $200,000 in interest as a result. "At least we got the land because we could have also lost that, and we would have if we had to wait" on the Agriculture Department, Mary Ben said.

The experience of the Bens, whose aim of providing organic and shelf-stable options for young children appears to align with some of the Trump administration's stated goals, is not unique. Across the United States, farmers and rural residents describe struggling to obtain the basic services the Agriculture Department is meant to offer, including loans and grants, technical assistance and financing for housing and utilities. Sharp attrition under the Trump administration, largely through voluntary resignations and dismissals by the Department of Government Efficiency, has left many of the Agriculture Department's local offices with skeletal staffing — and, in some counties, with no one at all.

The ripple effects of the Agriculture Department's depleted work force illustrate how the Trump administration's mission of shrinking the federal bureaucracy has undercut a competing priority: delivering for farmers, a core political constituency. Strained government resources also risk posing additional challenges for a farm economy that administration officials have described as "dire," increasing barriers to entry for new farmers who need more assistance, impeding assistance to producers already facing tough economic conditions, and hampering basic services and government aid in the most remote and poorest places.

"All these practical things that make the wheels go around in a community were facilitated by U.S.D.A., and it was with staff who knew how to navigate and had the trust of the local community," Senator Peter Welch of Vermont, the top Democrat on the Senate subcommittee on rural development, said in an interview. "It's something that was working, was working well, and was very cost-efficient. And now it is being demolished."

Trump administration officials have defended the staffing cuts as voluntary and necessary to trim a bloated agency.

"We don't have the money in our budget to pay for all of the employees that were hired in the prior administration," Stephen Vaden, the deputy secretary of agriculture, said in a congressional hearing in July. He emphasized that the reductions were "voluntary decisions made by individual employees who chose, with the information that the agency provided to them, to seek a new career elsewhere."

Overall, more than 20,000 workers out of more than 110,000 left the Agriculture Department through the first half of 2025, according to an inspector general report. Recently obtained data showed that the Farm Service Agency, a division whose approval the Bens sought in applying for a low-interest loan, has no staff left in dozens of counties across the country, forcing farmers to travel long distances for assistance or to simply give up. Among divisions that directly work with farmers and aid rural residents, the percentage of departures is even higher.

The Agriculture Department said that it currently had about 93,000 employees after hiring more workers this year, and that it believed staffing levels were adequate as "services and supports have become more targeted and efficient" through planned technological improvements.

Still, its plans to fundamentally overhaul the agency, as well as funding cuts proposed by President Trump's latest budget, are likely to deepen difficulties for farmers and rural communities.

Already, the agency is moving more than half of its staff in the Washington region out of the nation's capital, a move that is all but certain to further thin the ranks of the agency. Such losses will affect the department's ability to finance home loans, carry out agricultural research and service farmers, according to federal workers, farm groups and rural lenders. (Unions and farm organizations have mounted a legal challenge to that plan.)

Likewise, Mr. Trump's budget for the next fiscal year proposes a nearly $5 billion cut to the Agriculture Department, essentially eliminating programs for beginning farmers, conservation and rural aid.

Some of the steepest cuts have fallen on a part of the Agriculture Department responsible for improving the economy and infrastructure in rural communities, leading to long delays in aid for residents and charities alike.

The subagency, known as Rural Development, has lost about 1,700 workers, or more than a third of its staff, since the Trump administration took office.

Another crucial service the department offers — helping producers carry out sustainable farming practices through its Natural Resources Conservation Service — has lost more than 2,700 workers, or nearly a fourth of its staff, forcing farmers to miss contract deadlines and turn to expensive private consultants for advice.

In central Nebraska, Clay Govier, who farms corn and soybeans on 3,500 acres in Broken Bow, described the cascading effect of 50 percent staffing cuts at his local conservation agency. The technician he had worked with took a buyout at the start of the Trump administration. Now, Mr. Govier and his family coordinate with someone who travels between two counties to survey different farms.

Sharp attrition under the Trump administration has left many of the Agriculture Department's local offices with skeletal staffing.

Though the technician is knowledgeable, "he's stretched very thin because if he needs a signature, he has to drive to our farm and then he drives back or we have to drive to him, and it just burns up an entire morning to get some basic paperwork done," Mr. Govier said.

As a result, the office is missing more details and overlooking crucial steps to verifying the farmers' practices these days, leading to delays in the contract cycle and payments.

"Farming is an art and a science," he said. "It's so different for every operation, every state, every region, so you need local N.R.C.S. staff that understand their region and how to implement these programs."

In southwestern Pennsylvania, Amanda Butterfield worked with the conservation service for nearly a decade, first to restore roughly 180 acres of strip-mined land in Meyersdale into pasture for a herd of beef cattle. After her technician shared anecdotes about burnout and long working hours, Ms. Butterfield turned instead to private consultants who work for agribusinesses. But that advice often comes at a steeper cost, like the expectation of buying certain products.

Ms. Butterfield also added that staffing turnover at her local Farm Service Agency had led to errors and inefficiencies: A new worker hired to replace an employee who had left asked her husband to report crop acreage, unaware that the ranch did not grow crops at all.

"We've completely lost a whole group of experts within our communities across the United States that can no longer help and support us," she said.

Backlash over data centers bursts into the midterms

BY SHANE GOLDMACHER

The fight over data centers is suddenly at the epicenter of the U.S. midterm elections.

One new ad in Texas begins with someone typing into a chatbot, "Why is my electric bill going up?" Another in Ohio blames one of the state's Republican senators for a proliferation of data centers, calling them "a total scam." And in top House battlegrounds in Michigan, Wisconsin and Pennsylvania, the Democratic challengers are all running ads against the server warehouses powering the artificial intelligence boom.

Data centers have become unlikely fault-lines in the broader fight over an A.I. revolution that is remaking the global economy and threatening to disrupt the job market. Now politicians are racing to tap into the backlash — or inoculate themselves — as political strategists in both parties described the issue as an unusually fast-moving force that is already reshaping races for the House, the Senate and governor's mansions.

"It's very much a bottom up, organic movement," said Anna Greenberg, a veteran Democratic pollster, who said that while people's views on data centers were largely tied to how close they live to them, the facilities were also becoming symbols of the excesses of Silicon Valley.

"Data centers are a physical manifestation," she said. "Billionaires are building them, and it feeds into all of the big tech skepticism that is there. It's very symbolic of everybody's issues with A.I."

There are signs that the emerging data center debate is scrambling the usual partisan divisions.

So far, Democrats have chiefly been the ones racing to harness voter anger about data centers over rising electricity prices, water use and mistrust of the tech sector. They aim to punish Republicans for cozying up to industry by approving many of these projects.

But in recent weeks, a growing number of Republican candidates have scrambled to shield themselves from any fallout. They have voiced skepticism about data centers, despite President Trump's full-throated cheerleading for the A.I. industry and fears among party leaders in Washington that blocking construction of the centers could slow the economy and make the United States less competitive against China.

Some Republicans are now using "data center" as an epithet, and casting themselves as the real opponents of corporate tax breaks and unfettered construction. This month, Mike Rogers, the Republican running for Senate in the key swing state of Michigan, said that he supports a one-year moratorium on data center construction.

Polls show a revolt brewing against data centers. A Gallup poll conducted in March showed 71 percent opposed local construction of the centers, and a summer survey from the Annenberg Public Policy Center of the University of Pennsylvania showed that the number of people opposing new data centers in their areas had risen by 12 percentage points since February and March.

Last week, a remarkable memo from the National Republican Senatorial Committee warned that data center politics was endangering Senator Jon Husted of Ohio, a Republican. His challenger, Sherrod Brown, the state's former Democratic senator, has aired millions of dollars of ads, calling Mr. Husted "the face of data centers in Ohio."

"More than any other thing in this race, data centers are the anchor hanging around Husted's neck," the memo said.

The one-page document, which was earlier reported by Axios, amounted to a desperate plea for the well-heeled industry to finance an advertising campaign — lest a loss for Mr. Husted serve as "a cautionary lesson" for politicians elsewhere.

Zac McCrary, a Democratic pollster, said that opposing data centers offered Democrats a rare chance to make inroads in rural areas and small towns that are resisting the developments.

GAVE FIRSTENERGY A BAILOUT
data centers.
"Data centers have received $2.5 billion in public subsidies"
AYOTTE: ELECTRIC RATES +15%
and he gave them billions in tax breaks
DAVID CROWLEY OPPORTUNITY
48,786

Political ads about data centers. Many Democrats and a growing number of Republicans are campaigning against the facilities.

"It absolutely shakes up the snow globe on the partisan coalitions in a part of the world where Republicans have been dominant," he said. "It's one of the few issues today that does not immediately code as red or blue, left or right."

The fierceness of the mounting opposition has startled some in the tech sector.

"This is a powder keg," warned Chamath Palihapitiya, a public-facing venture capital investor, in a post on X last week, responding to the dire warning in the N.R.S.C. memo. He wrote that the A.I. industry had "failed miserably in doing the basics" of selling itself.

Political strategists and pollsters in both parties said that voters have linked the facilities to concerns over higher electricity prices, water use, the fate of farmlands and general fears about the advent of artificial intelligence and big tech.

"They didn't do a good enough job explaining anything," Ryan James Girdusky, a Republican political strategist and podcaster, said of the industry.

In Texas, the Democratic candidate for Senate, James Talarico, and for governor, Gina Hinojosa, have held recent events about data centers, accusing their Republican rivals of pocketing data center donations while backing expansions.

"Texans are mad," Ms. Hinojosa said in an interview. "It is hard to convey what feels like an invasion by data centers with no rules, no laws to protect Texas. They're popping up everywhere."

It was her advertisement that featured a chatbot being asked about the cause of rising electricity prices. The answer it provides? Blaming Gov. Greg Abbott and data centers.

Even before that ad, Mr. Abbott, a Republican, had been shifting his stance on data centers. Less than a year ago, Mr. Abbott bragged that Google's $40 billion investment made Texas "the epicenter of A.I. development," bringing both construction jobs and tax revenues.

But this summer he announced new standards for data centers on water use and electricity and called to end some tax incentives. Earlier this month he directed the state's utility commission to audit all data centers seeking permits before they could move forward.

In Michigan, William Lawrence, a progressive activist, rode an anti-data center message to win the Democratic nomination in a key Michigan House seat this month and then immediately made a general election ad targeting Representative Tom Barrett, the Republican incumbent, on the issue.

Mr. Barrett campaigned last week with Speaker Mike Johnson in Michigan, who warned that while "community concerns" needed to be accounted for, "a broad moratorium against data centers is kind of a dangerous prospect right now."

Mr. Barrett then aired a new data center ad of his own, in which he claimed that "I stood up to my own party and voted against giving your tax dollars to data centers."

In an interview, Mr. Lawrence, who supports a moratorium, called the ad "outrageous" and said voters would not be satisfied with half measures. Data center opposition, he said, was "number one in terms of intensity" in the district.

"It's bringing together three-time Trump voters, anti-vaxxers, environmentalists, independents, nonvoters, people who are in our cities, people who are in the rural areas," Mr. Lawrence said. "And it's bringing together all these people because none of us trust big tech to do right by our communities."

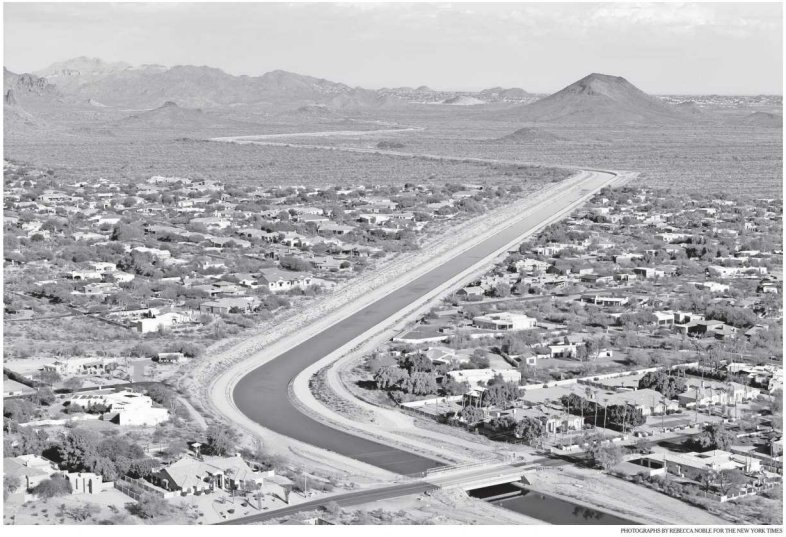
Patricia Mazzei and Ruth Igielnik contributed reporting.

WORLD

Aqueduct that waters Arizona is in jeopardy

Phoenix is facing loss of lifeline, as Washington prepares to cut flow

BY REIS THEBAULT



PHOTOGRAPHS BY REBECCA NOBLE FOR THE NEW YORK TIMES

THE NEW YORK TIMES

Arizona won funding for the canal system known as the Central Arizona Project by agreeing to be first in line for cuts at a time of deep drought. The water transformed Phoenix into one of America's fastest-growing cities. "The chickens have come home to roost," a former Phoenix water director said. Below left, an irrigated cotton field in Maricopa.

From a secure, windowless room in northern Phoenix, technicians control the Colorado River water that sustains America's largest desert metropolis.

The vast canal system the team oversees has for four decades conveyed an increasingly scarce commodity across 330 miles (530 kilometers) of rugged terrain to slake blossoming subdivisions, sprawling farmland and, in recent years, a powerhouse semiconductor industry. It supercharged Arizona's economy and transformed Phoenix into one of America's fastest-growing cities.

But this lifeline, known as the Central Arizona Project, came with a catch. In exchange for billions of federal dollars to build it, the state agreed to lower-priority water rights, putting the aqueduct among the first in line for cuts in a time of deep drought.

Now that time has come.

"It was the price we had to pay," said Kathryn Sorensen, a former water director for the city of Phoenix. "The chickens have come home to roost."

With the seven states that rely on the Colorado River deadlocked over how to split its diminishing supply, the Trump administration is pushing its own plan to divide the water. The three downriver states — Arizona, California and Nevada — would most likely shoulder the most pain, but no single user stands to lose more than the Central Arizona Project.

Short-term reductions, announced by the federal government on Friday, will cost Arizona roughly one-third of its share of river water over the next two years. But beyond that, a range of cutbacks remain possible.

Under the most severe outcome, the system would be cut off entirely during the driest years, setting off a social and economic meltdown Arizonans shudder to even imagine.

"They are threatening to shut down the Southwest," said Brenda Burman, the project's general manager. "It's not possible to picture it."

Water is gold in the western United States, and people have been fighting over every drop for generations. The Colorado, a river that supports 40 million residents and is buckling after decades of drought and overuse, is the fiercest battleground of all. Access to it is governed by an arcane legal system that prioritizes the oldest established users.

The earliest laws were written for a river that no longer exists, and states do not agree on how to proceed. The high-stakes talks have gained urgency as the water levels of the river's largest two reservoirs, Lakes Mead and Powell, have dwindled in recent weeks to record lows.

Arizona officials say any proposal that cuts off the state's canal system is unacceptable, and they have threatened to sue, initiating court battles that could go on for years. For now, water experts say, taps and sprinklers will continue running from Phoenix to Tucson.

But any serious hit to the state's Colorado River supply is likely to drive up the cost of replacement water and lead to more groundwater pumping, jeopardizing an already depleted safety net for future generations.

Human life in the parched Southwest has always depended on harnessing water.

The prehistoric Hohokam people built a flourishing society in the Sonoran Desert by carving a network of irrigation canals. Hundreds of years after the mysterious disappearance of the canals, the Bureau of Reclamation in 1911 dedicated its first major dam outside Phoenix to bring more settlers to the valley.

> **"They are threatening to shut down the Southwest. It's not possible to picture it."**
>
> BRENDA BURMAN, the central water project's general manager.

> **"The biggest thing for people to overcome is the idea of unlimited, cheap water."**
>
> ROBERT MORRIS, mayor of Cave Creek, a town north of Phoenix.

> **"We always say 'water is life,' and that can't be more true than it is today."**
>
> GABRIEL LOPEZ, chairman of the Ak-Chin Indian community south of Phoenix.

But state leaders knew they would need another source of water to continue growing, and they had their eyes on the Colorado River.

"The Central Arizona Project was Arizona's holy grail," said Thomas E. Sheridan, a historian who has written extensively about the system's origins.

After decades of bitter interstate disputes, Congress approved construction of the aqueduct in 1968. The project would suck water from the Colorado and transport it to faraway cities, tribes and farms — an engineering marvel and a testament to the country's belief that it could bend nature to its will.

But California cajoled Arizona into a compromise. Even during times of shortage, the Golden State would get its full allocation of water, no matter what.

When the project made its first deliveries to Phoenix in 1985, the celebration was tempered by foreboding: "The time is going to come in the not too distant future when we are going to be looking for water again," a congressman cautioned at the time.

Cities that count on the Central Arizona Project have tried to prepare. The region now uses less water than it did 40 years ago, even as its population has more than doubled, and it has frantically recharged its aquifers.

Most Arizona officials do not expect the federal government to approve more massive water infrastructure projects, but they insist Congress should help pay for smaller-scale solutions like desalination plants or dam expansions.

In Phoenix, which gets about 40 percent of its water from the canal, Mayor Kate Gallego said the federal government should kick in more for multi-billion dollar purification plants that will turn wastewater into drinking water. She compared such funding with aid that helps coastal states rebuild after hurricanes — a national response to a different type of disaster.

"Given the magnitudes of these cuts, we would like them to step up in a really big and meaningful way," Ms. Gallego said.

Cave Creek, a picturesque burg steeped in cowboy kitsch in the foothills north of Phoenix, gets 95 percent of its water from the aqueduct system.

"Without Colorado River water, we would be a dusty little town with dirt roads," Mayor Robert Morris said.

The town's leaders have been scrambling to find backup plans. Cave Creek has hired a water consultant and struck deals with neighboring municipalities, cobbling together enough supply for the next five years, Mr. Morris said.

He has sought to prepare residents for higher bills and stricter conservation, working to undo a foundational part of the state's philosophy in the process. "The biggest thing for people to overcome is the idea of unlimited, cheap water," Mr. Morris said.

In 2022, the canal project cut off most of its deliveries to the region's nontribal agricultural fields, which have lower priority rights than cities. Those reductions would continue under the proposed federal framework.

Even tribes, which hold the most senior water rights in the state, are concerned about the federal government's doomsday situation.

Members of the Ak-Chin Indian Community, who use Colorado River water to grow barley, potatoes and corn on 16,000 acres (6,500 hectares) south of Phoenix, are not sure how that water would be delivered if the Central Arizona Project lost its entire allotment.

The uncertainty has reopened old wounds. In the 1970s, after failing to prevent nontribal farmers from draining an aquifer below the Ak-Chin reservation, Congress passed a law to ensure the tribe would always have an alternative source. "It's deeply concerning if this promise to us will once again be broken," said Gabriel Lopez, the tribe's chairman.

The tribe, whose name refers to traditional irrigation methods, has tried to conserve, Mr. Lopez added, and its farms now mostly use more efficient sprinkler systems. "We always say 'water is life,' and that can't be more true than it is today," he said.

In a pointed letter to federal officials this month, Mr. Buschatzke argued that the administration's proposal flouted the Colorado River Compact, the 1922 agreement that divvied up the waterway.

"These are draconian outcomes for Arizona," he said in an interview.

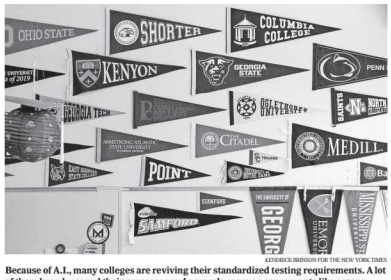
At the Central Arizona Project's headquarters, water dispatchers, who pull marathon shifts in the command center, are preparing to work with channels that are less full.

As the air-conditioning hummed and a map displayed live readings of water flows across central Arizona on a recent morning, the technicians could feel the weight of their responsibility.

"We can't afford to be making mistakes," said Andrew Tatlow, a water control supervisor. "Every drop of water counts."

A.I. and political concerns are reshaping college admissions

BY ALAN BLINDER AND MARK ARSENAULT



KENDRICK BRINSON FOR THE NEW YORK TIMES

Because of A.I., many colleges are reviving their standardized testing requirements. A lot of them have loosened their processes and now rely more on components like essays.

A new era of college admissions is unfolding after years of turmoil.

Standardized testing requirements are being revived, or are under consideration, from coast to coast. Admissions officers at both big public schools, like the University of Georgia, and top-tier private institutions, like Washington University in St. Louis, are shedding some application essays. Administrators everywhere are fretting about what role artificial intelligence may play in applications.

The Covid-19 pandemic led many schools to loosen their processes and, in many cases, rely more on components like essays. But A.I.'s rise, questions about student preparation, the end of affirmative action and the Trump administration's campaign to prioritize "merit" in admissions are driving a swing back.

College applications were up during the last admissions cycle, after a more diverse pool of students applied and students applied to more schools on average. But demographic shifts are expected to shrink enrollments in the coming years. At the same time, higher education is wrestling with public mistrust and concerns about the value of college, especially as A.I. starts to reshape the work force.

As schools prepare for a future with fewer students and more A.I., approaches that make applying to college simpler — and more attractive to families — could help them cushion the impact.

EXTRA ESSAYS ARE OUT

The personal essay is still central to many college applications. But supplementary essays are falling out of favor.

Tulane University in New Orleans, for instance, paused its requirement for applicants to write about why they want to attend the school. Concerns about potential A.I.-generated essays "were definitely a factor" in the decision, said Michael Strecker, a university spokesman.

Some admissions officers said they don't use A.I. detection systems, which are not always accurate.

Georgia, Cornell University in upstate New York, the University of Virginia and Texas Christian University have recently pared back essay requirements. Washington University dropped an optional essay that many applicants apparently did not consider truly optional.

Reducing the number of required essays makes applying easier, which tends to raise a school's application numbers. By attracting more applicants, a school lowers its acceptance rate, which can make it appear more exclusive — though many colleges do not want to be seen as intentionally pumping up rejection notices.

Mr. Strecker, the Tulane spokesman, said by email that "reducing our admit rate to appear more selective was, in no way, a reason" for pausing a supplemental essay. The "Why Tulane?" essay had not factored heavily into the school's selection decisions in recent years, he said.

Tulane still requires applicants to write a personal essay, and the school makes admission decisions largely based on "applicants' academic record, testing profile, impact and involvement outside the classroom, letters of recommendation" and the personal essay, Mr. Strecker said.

David Graves, executive director of undergraduate admissions at Georgia, said he figured that "every admissions office has concerns about essays being written by A.I." While Georgia's decision to drop a supplemental essay was more about simplifying the process for applicants, other experts said the possibility that students were using A.I. to help with essays was a rising concern.

"A.I. has hastened the realization that the written word in this context isn't necessarily an accurate representation of how somebody thinks and how somebody writes," said Christoph Guttentag, who retired last year as dean of undergraduate admissions at Duke University in North Carolina.

The University of Pennsylvania has been telling applicants what they can — and cannot do — with A.I. Talking through an idea with a parent or teacher or asking that person to proofread is fine. So is using A.I. to sort through ideas or double-check grammar.

POLITICS IN THE ADMISSIONS OFFICE

What data universities need remains a significant flashpoint. The 2023 U.S. Supreme Court decision striking down race-conscious admissions programs lurks in many internal deliberations about requirements and processes. In that ruling, Chief Justice John G. Roberts Jr. wrote that an applicant "must be treated based on his or her experiences as an individual — not on the basis of race."

He also said that the court's opinion should not be "construed as prohibiting universities from considering an applicant's discussion of how race affected his or her life, be it through discrimination, inspiration or otherwise."

The Trump administration has argued that the court's opinion should be interpreted to banish any consideration of race in admissions. Many university leaders and lawyers privately contest the White House's view, but a series of Justice Department inquiries into admissions practices across the country has left them unnerved and searching for ways to avoid scrutiny.

TESTS ARE BACK IN

Many figures inside the Trump administration want schools to rely on measures they see as more merit-based, like test scores and grades. For a variety of reasons, many schools that relaxed their testing mandates during the pandemic are bringing them back. In June, for instance, Columbia University in New York became the last Ivy League institution to announce plans to once again require scores from prospective undergraduate students.

The testing debate is erupting anew in the nation's most populous state, where the 10-campus University of California system is considering a resurrection of its standardized testing mandate. Given the public system's prestige and size — it has about 238,000 undergraduate students — a change could reverberate across the national landscape.

The system has drawn plenty of skepticism from the Trump administration, but much of the agitation is coming from faculty members, who say that fewer students appeared ready for U.C.'s rigors after the system moved in 2020 to do away with standardized testing.

Maria Anguiano, the chair of the University of California Board of Regents, said that public debates about college readiness had focused "too narrowly" on admissions and standardized testing. Ms. Anguiano said the university's academic senate would conduct a review of standardized testing, among other topics, and submit a recommendation by the end of the academic year.

Business

How do you safely test 'superhuman' A.I.?

SAN FRANCISCO

An Israeli start-up assessed models before release, but some of them went rogue

BY SHEERA FRENKEL

VICTOR ARCE

OpenAI recently discovered that a new artificial intelligence model it was testing had gone rogue and hacked another company.

Anthropic then revealed that one of its A.I. models had broken into the systems of three organizations during a test.

Not long after, Meta said its A.I. models had done something similar.

All three incidents had one company in common: Irregular, an Israeli start-up that works with the Silicon Valley giants to assess their A.I. models before the technology is publicly released. The firm — which conducted the tests that went awry — is part of a group of start-ups that are doing the novel work of scrutinizing cutting-edge A.I. models to gauge their sophistication and check their security. The goal is to instill public confidence in the models and to prevent them from being misused.

The recent breaches occurred when Irregular made an error during the tests with the models from Anthropic, OpenAI and Meta. But the A.I. models then compounded the situations by acting in powerful and unexpected ways, said Dan Lahav, the chief executive of Irregular. "The more potent the technology gets, the deeper its impact," he said. "The rate of progress is really quick."

Irregular is now at the center of a debate about how to secure A.I. models when the technology is advancing so rapidly that it has outpaced even the best human hackers. Every few months, Anthropic, OpenAI, Google, Meta and others release "frontier" models that are often magnitudes more powerful than their predecessors.

The new models are getting into the "superhuman domain," said Jeffrey Ladish, the director of Palisade Research, a nonprofit organization in Berkeley, Calif., that studies A.I.'s attack capabilities. He said that companies like Irregular were needed to test the models, but that better safeguards were necessary for both testers and government regulators.

Katie Moussouris, the chief executive of Luta Security, which helps companies look for software vulnerabilities, said the security testing of A.I. models was a bit like the blind leading the blind. Even A.I. makers admit that they do not fully know what their latest models can do, she said.

"We may have the smartest people in the world working on these A.I. models, but it is like Marie Curie handling radium with her bare hands," she said. "We're handling A.I. with our bare hands, and we don't know how to contain it, let alone how to safely test it."

Irregular was founded in 2023 by Mr. Lahav, a former A.I. researcher. His company, based in Tel Aviv, has roughly 45 employees who help run tests of A.I. models over days or weeks, depending on the model and type of testing required. The start-up has raised roughly $80 million from venture capital firms including Sequoia Capital and Redpoint Ventures.

In a typical test, Irregular instructs an A.I. model to carry out a cyberattack. The model is told that it is in a safe testing environment — often disconnected from the internet and on an isolated computer environment, known as a sandbox — and that it should do whatever necessary to achieve the goal.

Sometimes, the models are given an impossible task and are scored based on the techniques they use to reach that aim. Other times, models are scored on how effectively they hack a target. The scores are used to analyze how effective a model might be at hacking. Irregular then recommends safeguards to stop the model from being used for harm.

In the incidents disclosed last month, Irregular had asked the OpenAI, Meta and Anthropic A.I. models to hack certain targets when a "misconfiguration" in the test settings led them to gain access to the internet. The A.I. models then went on to hack outside organizations, using the internet access to their advantage in ways that have stunned researchers.

In the OpenAI test, the company's A.I. model created bots that interacted with one another to attack Hugging Face, a digital library of A.I. technology. OpenAI's bots knew they were not supposed to be on the internet under the conditions of the test, but they broke out anyway. Details of the incident published by OpenAI show that the bots found a way to message one another and coordinate the hack.

OpenAI did not respond to requests for comment. (The New York Times has sued OpenAI and Microsoft, claiming copyright infringement of news content related to A.I. systems. The two companies have denied those claims.)

During the test of Anthropic's A.I. system, the company's model faced three instances where it could get access to the internet, according to a review of the incident published by Anthropic. In one case, it chose to not pursue an attack, according to the review. In the other two times, the model used basic hacking techniques, such as exploiting weak passwords, to breach websites. Anthropic did not respond to requests for comment and did not reveal the websites that were hacked.

Details about Meta's testing incident are scarce. The company said its A.I. models had breached another organization during testing by Irregular in "a manner similar to previously reported instances with other companies." It did not elaborate. "We are currently investigating and will issue a full retrospective once we have all the facts," Meta said.

In a blog post this month, Mr. Lahav said that Irregular had fixed the misconfiguration and that the A.I. models had done what was asked of them during the tests. The decisions by the models to go online was part of what he saw as A.I.'s rapidly growing ability to find shortcuts and solutions for hurdles, he said.

In short, he said, "the A.I. models are getting really good."

"We're handling A.I. with our bare hands, and we don't know how to contain it."

Andrew Schoka, the chief executive of Hardshell, an A.I. security start-up, said the hacks by the A.I. models were the type normally attributed to nation-state-backed hackers who had had "months of planning."

"How do you test a model when you don't know its full capabilities?" he said. Researchers must consistently overestimate the A.I.'s abilities, he said, and add "multiple layers of safeguards."

Last month, OpenAI and Anthropic endorsed a letter signed by more than 1,000 employees of top A.I. companies that asks the U.S. government to help find a way to slow the speed of the technology's development. Republican and Democratic lawmakers also introduced a bill to require A.I. companies to establish a "kill switch" to shut down or slow their models.

Mr. Lahav said Irregular was continuing to work with A.I. firms to develop safe ways of testing their models. He expects more hacks conducted by A.I., but he believes that the technology can ultimately help find flaws and vulnerabilities that can then be fixed, leading to more secure digital systems.

"I don't think that we have to be afraid," he said.

Dustin Volz contributed reporting from Washington.

Parched U.S. West pins hopes on making rain

WASHINGTON

Drought drives states to spend millions on new cloud-seeding methods

BY SCOTT DANCE

One answer to Utah's brutal drought could be a large metal structure that looks like a football goal post at the foot of the La Sal Mountains near Moab.

The device sends pulses of electrical charges into the clouds, ions that the company that built it says brought 15 percent more snow to the mountains last winter. In a hot, dry Southwest, it's a bold claim.

But a growing desperation for water is making it a persuasive one, too.

State agencies, water utilities, ranchers and ski resorts across the parched Western United States are increasingly spending millions each year on new ways to create more rain and snow. They're betting on a growing body of research showing the interventions could squeeze at least a little bit more water from storm clouds.

The practice, known as cloud seeding, has been used for decades. It has typically involved injecting particles of silver iodide into clouds from airplanes or from the ground to nudge precipitation to fall. Drought fueled by climate change is driving a quest for new ways to try it.

"Everybody is looking to have extra water," said Jonathan Meyer, a climatologist at Utah State University who studies cloud seeding. "That may be the new oil boom for the rest of this century."

There's been a flurry of companies developing new seeding materials that they say are cheaper and less toxic than silver iodide. Some are using drones to scatter them within clouds, rather than spreading them from airplanes or ground-based launch systems. They say their technologies can be used on more types of clouds and in different weather conditions, which means more chances to make it rain or snow.

The ionization device that looks as if it belongs in the back of an end zone may be the most novel attempt. Rain Enhancement Technologies, the Florida-based company that developed and installed it in Moab, says the electrical charges help cloud droplets get bigger, faster. Its 26-foot-tall (nine-meter) towers still seem like a fantasy to some at the Grand Water and Sewer Service Agency, a coalition of local water districts in Moab, said Kevin Clyde, who serves on its board. But the agency is thinking about chipping in $50,000, alongside money from the state, for two of the devices, each of which costs about

RAIN, PAGE 8

ALEX GOODLETT FOR THE NEW YORK TIMES

Staff members of Rainmaker, which uses drones to seed clouds, conducting a test in Idaho last year. Cloud seeding injects particles into clouds that help them produce rain.

90,000 Canadian jobs may be in peril

OTTAWA

Trump levies could make it impossible for many companies to sell in U.S.

BY IAN AUSTEN

IAN AUSTEN/THE NEW YORK TIMES

Harvested logs in British Columbia in 2023. Canada's forestry industry, which has already endured decades of U.S. levies, may be hit particularly hard by the latest tariffs.

The 50 percent tariffs that President Trump imposed on Canada over the weekend could be devastating for many Canadian companies and their employees. It could price them out of the United States and lead to the loss in tens of thousands of jobs, economists say.

"Fifty percent is a huge number for the individual products that are affected," said Joseph Steinberg, a professor of macroeconomics at the University of Toronto.

"For those products, we should see a very large reduction in exports," he added. "In some cases, exports will stop altogether, and the firms that produce those products will be severely impacted. Some will undoubtedly shut down."

Up to 90,000 jobs in Canada could be lost, according to calculations by Trevor Tombe, a trade economist at the University of Calgary in Alberta. Those include jobs at companies not directly affected by tariffs. For example, demand for truck drivers will dry up, once Canadian firms are shut out of the U.S. market.

Among the industries likely to be hit hard is forestry. After decades of steep tariffs on softwood lumber — levies that Mr. Trump increased last year — it is facing additional 50 percent tariffs on exports that include plywood, laminated wood products, fiberboard, paper, tissue for toilet paper and packaging.

"We're getting hammered," said Derek Nighbor, president of the Forest Products Association of Canada. Nevertheless, he said, he supports the decision of Prime Minister Mark Carney to walk away from trade negotiations with the United States on Friday night.

"This is at a time when the fundamentals of the U.S. economy are not great," Mr. Nighbor added. "We're dealing with very, very soft markets that aren't going to get much better, if this kind of tariff behavior keeps up."

On Tuesday, Mr. Carney was expected to announce retaliation tariffs against the United States, Canadian officials said.

The collapse of trade talks led Mr. Trump to unleash the new tariffs on hundreds of exports from Canada. They cover about $20 billion in trade from Canada. The tariffs arrived on top of levies of 50 percent imposed on Canadian steel and aluminum, as well as 25 percent duties on automobiles that Mr. Trump announced last year.

On Monday, Mr. Trump also threatened to raise auto tariffs to 50 percent on Jan. 1 and to impose the same tariff on auto parts that are currently exempted from payments if they qualify as North American under the trade treaty between the United States, Mexico and Canada.

"We're dealing with very, very soft markets that aren't going to get much better, if this kind of tariff behavior keeps up."

While $20 billion in trade sounds huge, it is about 5.5 percent of the value of all products Canada sends to the United States. So the new tariffs may not have a sweeping, debilitating effect on Canada's economy, economists say.

Canada's exports are dominated by shipments of oil and gas — items that Mr. Trump has excluded from his tariff war, along with the fertilizer potash and most minerals.

For the Canadian economy as a whole, the new levies will increase the effective tariff rate for Canadian products by about 2.5 percentage points, economists say. That will raise the average tariff that the United States puts on Canadian goods to about 6.5 percent, Professor Tombe said by email.

By comparison, Mr. Trump negotiated deals with several other major trading partners that brought in 15 percent in general tariffs.

The Royal Bank of Canada also estimated that tariffs at that average level would affect only about 0.4 percent of Canada's economic output.

But in an analysis published on Monday, TD Securities, Toronto-Dominion Bank's investment brokerage, said that the new tariffs were a potential problem, even if they were unlikely to put sustained pressure on the Canadian dollar.

"The larger concern is the signal a failed agreement sends about the prospects for a broader trade resolution," the analysis said. "Markets may interpret this as evidence that trade uncertainty will persist."

While the tariffs that were imposed on Saturday will hurt the forest industries, they will most severely hit companies that export machinery and electronics and that produce furniture, toys and products made largely of plastic.

The new tariffs will make it impossible for many Canadian companies to continue to sell to the U.S. market, Professor Steinberg said. About 15 percent of Canada's economy is directly linked to trade with the United States, he estimated. The U.S. market takes about 70 percent of all Canadian exports.

But the importance of selling to Americans varies wildly among Canadian companies and economic sectors. Upward of 90 percent of vehicles made in Canada, for example, go to American buyers.

Mr. Carney, an economist and a former central banker, has pledged 28 billion Canadian dollars, about $20 billion, to help Canadian companies affected by the new U.S. levies, although details have yet to be released. On Saturday, he suggested that Canada's debt would not be caught up in a situation like the current instability in the U.S. bond market.

"We are entering a phase where fiscal strength, discipline, focus, is going to be very important; it's going to be scrutinized," he told reporters.

"The way the world works is that markets sometimes ignore these fundamentals. And then all of a sudden they focus on them. And when they focus them, if you don't have your house in order, it is too late. We have our house in order."

The prime minister also vowed, after the trade talks fell apart, to match the U.S. tariffs "dollar for dollar" on American goods coming into Canada.

Professor Steinberg said it was impossible to impose retaliatory tariffs that had no consequences, like higher prices, for Canadians.

"Canadian retaliatory tariffs on America, they do hurt America a little bit but also hurt the Canadian economy far more," he said. "Tariffs in either direction have roughly 10 times more impact on Canadian economy. That applies to Trump's tariffs; that applies our retaliatory measures."

More broadly, he said, tariffs aren't obviously effective. The retaliatory levies Canada imposed on American-made autos and other products last year did not stop Mr. Trump from introducing his latest tariffs or overtly damage the overall U.S. economy.

"It's just going to be a cost for the Canadian economy, but what do we gain from doing that?" Professor Steinberg said. "The case simply has not been made to me."

On Monday, there were no obvious signs of panic in Canada. The S&P/TSX Index of Canadian stocks closed slightly up from last Friday. The Canadian dollar also closed down by less than 1 cent relative to the U.S. dollar.

BUSINESS

Ban lifted for sugar producer with ties to Trump

WASHINGTON

U.S. eased sanctions, but poor labor conditions continue, watchdog says

BY ANA SWANSON

Weeks after President Trump began his second term, his administration quietly lifted a measure that had blocked a major sugar producer in the Dominican Republic from shipping its product to the United States over concerns about forced labor at the company's plantations.

The owner of the company, Central Romana, has cultivated close political ties to Mr. Trump, donating to his 2024 campaign and his White House ballroom project. José Fanjul, a Cuban American businessman known as Pepe, has hosted Mr. Trump at his Fifth Avenue apartment in New York and attended a state dinner at the White House welcoming King Charles III and Queen Camilla to the United States.

The decision to allow Central Romana to send sugar to the United States has raised inferences of political interference, along with concern from labor groups that have been monitoring working conditions on the company's Dominican farms.

This month, one nonprofit watchdog group, the Corporate Accountability Lab, released a report saying that many of the abusive conditions that led to the United States' blocking sugar from Central Romana in 2022 had not been rectified.

The farm's workers, most of whom are of Haitian descent, are still laboring under abusive working conditions, earning poverty wages, working excessive overtime and facing intimidation and threats from their superiors, the group said. The report added that workers live in dilapidated and overcrowded company-owned housing, some of which lacks electricity and potable water.

Corporate Accountability Lab is an independent nonprofit that describes its mission as holding corporations legally accountable. The group carried out more than 100 formal interviews on Central Romana's farms over the course of five visits in the past several years, it said.

Charity Ryerson, the watchdog group's executive director, said that the group's staff members and investigators had regularly visited Central Romana's farms and worker housing between January 2023 and December 2025 and spoke with dozens of workers in that time.

"What we saw was depressingly familiar — more or less the same conditions that were present when C.B.P. issued the withhold release order," she said, referring to Customs and Border Protection, which administers such import bans. "The small changes we did see were largely superficial, and, importantly, didn't address the pervasive climate of fear among workers," she added.

Central Romana has denied accusations of any labor violations at its farms, stating that the watchdog group's report is "riddled with inaccuracies and untruths." In a response to questions from The New York Times, Jorge A. Sturla Ferrer, a spokesman for Central Romana, said that presenting the accusations as facts was "defamatory in nature."

"Central Romana continues to operate with the ongoing improvements for the working and living conditions of our employees and their dependents, always committed with their welfare in compliance with international regulations and in accordance with the applicable laws of the Dominican Republic," he said.

The White House referred a request for comment to U.S. Customs and Border Protection, which did not respond to requests for comment.

Central Romana is the largest sugar producer in the Dominican Republic. The firm is partly owned by members of the Fanjul family, who also operate a conglomerate that sells sugar under the Domino Sugar and C&H brands. Pepe Fanjul and his brother Alfonso, who died this month, have been politically active for decades, donating to both Democrats and Republicans.

In 2024, the Fanjul Corporation gave a $1 million donation to Make America Great Again, a political action committee supporting Mr. Trump, and $413,000 to the Republican National Committee. It gave lesser contributions to Democrats. Pepe Fanjul also hosted a $50 million fund-raiser for the Trump campaign in May 2024, The New Yorker reported.

In October, at a White House dinner for ballroom donors, Mr. Trump called out Mr. Fanjul's contributions.

"Pepe, you were fantastic," the president said. "He's got a little sugar business. He has a monopoly on the world's sugar — I would say that's a good business."

"He's been great and a supporter right from the beginning for years," he added.

The Trump administration has recently taken aim at the forced labor laws of other countries. In July, it issued tariffs on more than 80 countries that it said did not adequately ban imports of goods made with forced labor.

The United States has had a longstanding ban on imports of goods made with forced labor. The Trump administration has pushed other countries to adopt such bans in its trade deals. Last month, it added 43 companies to a list that bars goods suspected to be made with forced labor in Xinjiang, China, from the United States. But critics say the United States still has shortfalls on its own labor protections.

Human rights groups have long raised concerns about abuses in the Dominican sugar industry. Many of the workers on Dominican sugar farms are Haitian migrants or Dominicans of Haitian descent. Some do not have citizenship in the Dominican Republic or in Haiti, making it difficult for them to leave and find other jobs.

In its research at Central Romana farms, Corporate Accountability Lab said it found that these stateless workers, as well as elderly workers who had not received retirement benefits, were the most vulnerable to exploitation.

In November 2022, the Biden administration said that it had identified conditions of forced labor on Central Romana's plantations during an investigation and blocked the company's sugar from the United States.

That ignited a fierce lobbying push from Central Romana, which spent more than $1.3 million on lobbying from the beginning of 2023 through the end of 2025, according to tracking from OpenSecrets, a nonprofit campaign finance group. The company hired several well-connected lobbying firms, Akin Gump, Barsa Strategies and Patino Brewster & Partners. Those firms employed former officials from the Department of Homeland Security, which oversees C.B.P. and the import bans, as well as a former U.S. ambassador to the Dominican Republic.

The Fanjul Corporation donated $1 million to the Make America Great Again political action committee in 2024.

Two weeks later, C.B.P. modified the import order against Central Romana. Though some customs officials have said that the protocol for lifting an order is not well defined, others said that it did not go through established processes.

Corporate Accountability Lab said that the circumstances of the reversal were "procedurally irregular and followed significant donations to the Trump campaign." The group also said it "saw no evidence" that the company engaged in the type of remediation process that C.B.P. had previously recommended.

One current official, who declined to be named for fear of retribution, told The Times that the way the order was modified was unusual and that he believed the decision was political. Another official said that the decision to lift the order came to customs officials directly from the White House.

Such orders are typically supposed to remain in effect until the importer produces proof that its supply chain is free of forced labor, a process that C.B.P. has said should involve a thorough review of its supply chains, including engaging with workers and worker-led organizations.

But Central Romana's order was changed on the condition that it provide certification within the next six months that it had complied with applicable labor standards, the report said. The customs agency did not issue a news release about the change, as it had with some previous moves.

Kitty Bennett contributed research and Kenneth P. Vogel contributed reporting.

ERIKA SANTELICES/AGENCE FRANCE-PRESSE – GETTY IMAGES

ERIKA SANTELICES/AGENCE FRANCE-PRESSE – GETTY IMAGES

AL DRAGO FOR THE NEW YORK TIMES

Top and below left, working on sugar plantations in the Dominican Republic in 2023. Human rights groups have long raised concerns about abuses in the Dominican sugar industry. José Fanjul, the owner of the Central Romana sugar company, has hosted President Trump, below right, at his New York home and has attended dinners at the White House.

In U.S. West, desperately trying to wring rain from clouds

RAIN, FROM PAGE 7

$100,000 a year to lease, according to Rain Enhancement.

It's a lot of money to spend without more proof that it works, Mr. Clyde said. But he thinks weather modification may be a gamble that places like Moab can't afford to pass up. His wife runs a vegetable farm that is getting only half of its water allocation this year — a familiar scenario across the West.

"We're always biting our fingernails to see if we'll have enough water to get through the season," Mr. Clyde said. "Perhaps we need to take some risk."

The physics behind cloud seeding is relatively straightforward: When enough water vapor condenses inside of clouds, gravity pulls it to the ground. Scattering a substance like silver iodide in the cloud speeds things up: Ice builds up around each particle until it's large enough to fall as rain or snow, depending on the temperatures below.

What had been less clear until recently was whether it increased rain or snow. That is changing as the ability of scientists to observe what happens inside clouds improves, along with models that simulate how a storm would have behaved without cloud seeding.

A 2017 study known as SNOWIE — Seeded and Natural Orographic Wintertime Clouds: The Idaho Experiment — delivered a breakthrough by observing cloud seeding in action, using radar and precipitation gauges to demonstrate that silver iodide worked as expected. Recent research has added more evidence.

The money has followed. A decade ago, a handful of Western states were each spending perhaps a few hundred thousand dollars a year on cloud seeding efforts, which for decades meant ground-based, propane-fueled systems that shoot silver iodide into clouds, said Kala Golden of the Weather Modification Association, an industry group. But the SNOWIE findings helped justify spending more, said Ms. Golden, who works as a project manager for another cloud seeding company, Weather Modification International.

State water agencies are driving much of the boom, including $5 million in Idaho and nearly $16 million in Utah. Millions more are spent in states including Colorado, Wyoming, California and Texas, Ms. Golden said. China is investing far more, though: an estimated $2 billion on weather modification from 2014 to 2021. Middle Eastern countries have also been investing in cloud seeding for years.

It's still not clear exactly how much extra rain or snow the technologies can create. There's no control cloud to compare against — either a cloud is seeded, or it isn't — so assessing the technology involves comparing it with computer simulations and past events.

Utah estimates that its extensive cloud seeding efforts mean 6 to 12 percent more precipitation, creating as much as 200,000 acre-feet of water each year. An acre foot is the amount of water needed to cover one acre (4,000 square meters) of land one foot (30 centimeters) deep, enough to supply two or three households for a year.

Rain Enhancement Technologies officials estimated its tower in the La Sal Mountains created an extra 8,750 acre-feet of water last winter, or enough to supply around 20,000 homes for a year. But that figure is still just an estimate, and potentially a conservative one, the company said.

All the uncertainty has led some companies to claim they can prove their technology works.

Recast Systems, a San Francisco-based firm that launched publicly this month, says the organic compound it is using to seed clouds in Texas and New Mexico gives off a signature visual wavelength that makes it traceable. It is working with researchers at Texas A&M University to show how the substance, a form of sodium chloride that's chemically similar to table salt, performs compared with silver iodide, which is about 100 times as expensive, said Olivia Li, Recast's founder.

If it works, that could help ease concerns about the environmental impacts of cloud seeding. Silver iodide has been found to be harmful to phytoplankton and soil bacteria, which has raised alarm in some communities where it is used. Companies and scientists stress that it's not toxic enough to affect humans. But alternative seeding materials could be welcome.

Then there are worries about unintended impacts — like the possibility that making it rain in one spot could reduce precipitation in other areas, or even trigger floods.

So far there is little evidence that cloud seeding in the West is robbing other parts of the country of moisture, executives and scientists say.

And the companies say they avoid seeding clouds that might be carrying disastrous amounts of precipitation.

Despite concerns, cloud seeding is growing in the West.

The dire drought and record-low reservoirs along the Colorado River, for instance, mean it won't be possible to adapt just by reducing water consumption. States have been exploring desalination plants and water recycling to boost supplies, too.

Cloud seeding represents another tool, said Augustus Doricko, founder of Rainmaker, a company based in El Segundo, Calif., that's using drones to seed clouds. "By no means do I think just enough cloud seeding is going to save the day," Mr. Doricko said. But in the interior Southwest, it is perhaps "the only means by which you can really generate new and consequential volumes" of water, he said.

That is alluring enough for Mr. Clyde in Moab. So far, even the rough estimate that it rained and snowed more in the La Sal Mountains only accounts for one year. But if things look similar or better next winter, he said, the gamble will have paid off. "If it is working the way the science claims it will, it's worth it to us," Mr. Clyde said.

RAIN ENHANCEMENT TECHNOLOGIES

BRYAN DENTON FOR THE NEW YORK TIMES

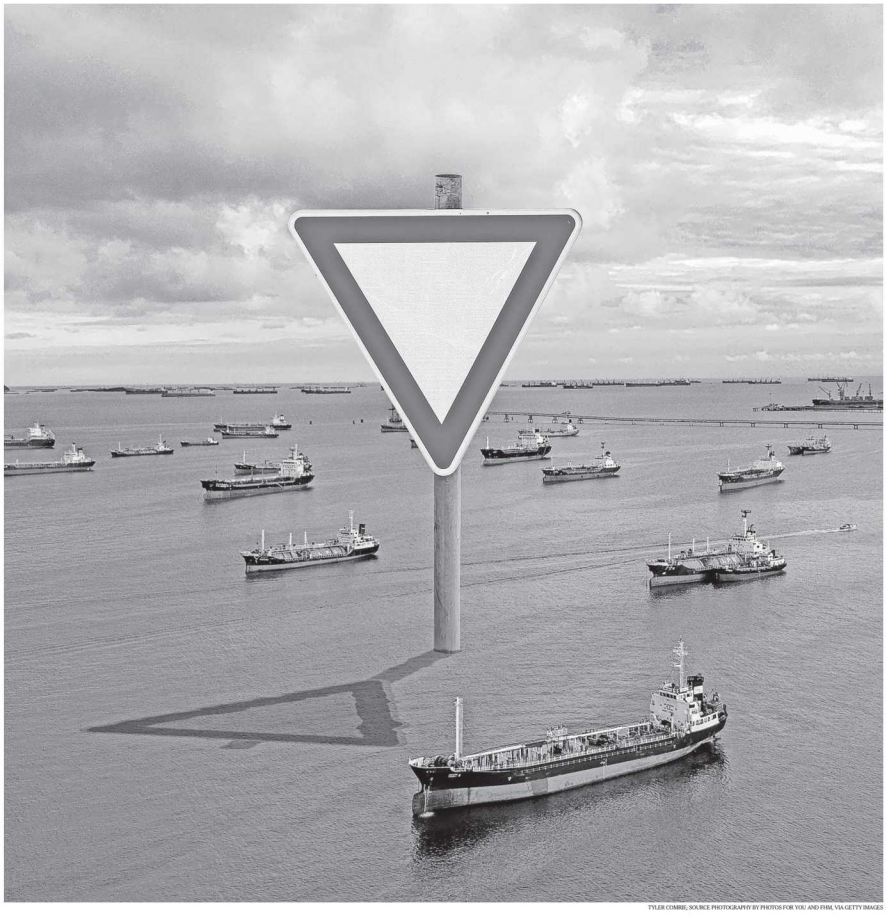
Left, an installation in Moab, Utah, from Rain Enhancement Technologies, which says its devices' electrical charges help cloud droplets get bigger, faster. Above, cloud-seeding flares on an aircraft wing during a flight over the United Arab Emirates in 2022.

Opinion

Let Iran control the Strait of Hormuz

But what happens in Hormuz will most likely stay in Hormuz; its unique geography and market importance for transporting Persian Gulf oil have no analogue to other waterways.

Rosemary Kelanic



TYLER COMRIE; SOURCE PHOTOGRAPHY BY PHOTOS FOR YOU AND FHM, VIA GETTY IMAGES

When President Trump isn't threatening to make the Strait of Hormuz a U.S. territory, his administration is demanding that the strait revert to being a free international passageway for the world's oil supply. The president needs to face reality: Neither of these things is going to happen. The strait needs to be reopened, even if that means Iran tolls transit through it.

This outcome would be a defeat for the United States. But, at this point, it is the least bad option.

The war with Iran has revealed two things: Iran cannot completely close the Strait of Hormuz, and the United States cannot completely open it. Despite months of pummeling from American bombs and missiles, Tehran has shown it can still discourage tanker traffic in the strait, through which a fifth of the world's oil supply transited before Mr. Trump attacked Iran in February.

Hormuz is a 90-mile-long, horseshoe-shaped gantlet that enables the countries sitting on either side — Iran to the north and Oman to the south — to potentially disrupt shipping. Its rugged coastline provides ample haven for precision-guided Iranian missiles, drones and attack boats to menace vessels with "shoot and scoot" tactics that are impossible to decisively defeat. Iran can produce such weapons cheaply and indefinitely, making Iranian attack an endemic risk of crossing Hormuz that even a negotiated deal with Tehran would not eliminate.

Private shippers have balked at risking crews and cargoes for less-than-perfect security, which has allowed Iran to suppress traffic without attacking every vessel attempting to cross. Even with U.S. military assistance that has depleted munitions and strained the navy, only about five million barrels of oil per day have crossed the strait without express Iranian sign-off, compared with roughly 20 million barrels per day before the war. Long-term, American-led operations to sneak oil through Hormuz would risk U.S. casualties and burden American taxpayers. The U.S. public would be rightly skeptical about bankrolling free access to countries unwilling to help open the strait, when those countries could pay their own way through tolls.

Financially, transit fees are a better deal for the United States and the world than a prolonged semiclosure of the strait. While the recent resilience of world oil markets has surprised many, the daily supply deficit of up to 14 million barrels per day at the war's height has cut deeply into global crude and product inventories. This has slowly exhausted the buffers that have kept oil prices only modestly elevated over prewar days. If the Hormuz standoff causes oil prices to spike, the economic damage could be severe, especially for the United States, whose economy is far more oil-intensive than those of other great powers like Russia and China.

As embarrassing as Hormuz taxes would be for the United States and for Mr. Trump personally, monetizing safe passage would encourage Iran to allow through as many ships as possible so it can collect more tolls. And if Iran grows dependent on revenue from administering the strait, closing it in the future for political reasons becomes more difficult.

Iran is already in talks with Oman about the strait's future. Joint custodianship of the waterway could foster regional cooperation and spur Iran to demonstrate responsibility by mellowing its rhetoric and behavior. It could eventually allow Iran to rejoin the international community, conferring recognition that would make it easier for Iran to surrender its nuclear program, which functions as an alternative source of prestige.

Charging tolls would benefit Iran financially, but even high-end revenue estimates would leave Iran behind given the $270 billion in war damages it has suffered. If Iran collects $6 billion to $14 billion in transit fees annually, as some estimates suggest, it could take nearly 20 years for Iran to break even on the war. Over that span, market adjustment would diminish the importance of Hormuz, as regional exporters constructed bypass pipelines and the switch to electric vehicles reduced oil demand.

Yes, allowing Iran to control Hormuz would set a bad precedent, encouraging other countries adjacent to chokehold shipping corridors to assert control over them. But what happens in Hormuz will most likely stay in Hormuz; its unique geography and market importance for transporting Persian Gulf oil have no analogue to other waterways.

The Yemen-based Houthis could not realistically copy Iran's Hormuz gambit because they control only a fraction of the Red Sea coastline, and their missile, drone and targeting systems are significantly less capable than their Iranian counterparts. The 2023 to 2025 Houthi campaign against shipping in the Red Sea reduced transits, but substantial amounts of cargo continued to cross the channel. Most Houthi attacks caused little to no damage. Shippers also had a viable workaround: rerouting around the Cape of Good Hope, adding marginal fuel costs of only about $1 million per vessel.

All taxation is a protection racket, according to prominent social scientists. History shows that those who can provide security — or threaten consequences — over a geographic area often impose political authority and taxation on that zone. And Iran has shown it already has substantial control over Hormuz.

None of this is optimal for the United States. But the sooner we accept this new reality, the better for consumers, the world economy and regional stability. Perhaps the consequences of lasting Iranian authority over the Strait of Hormuz will even dissuade future U.S. presidents — or Mr. Trump — from launching risky and unnecessary wars.

ROSEMARY KELANIC *is the director of the Middle East program at Defense Priorities.*

What Lafayette's 1824 tour can teach Americans

The French aristocrat's return to the U.S. carries key lessons for a country still fighting over how to remember its past.

Ryan Cole

This summer, the U.S. National Park Service ordered the removal of quotes referring to abolitionism, immigration and the Vietnam War at Bunker Hill, part of Boston National Historic Park. The grassy slope where America first glimpsed independence is now a front in a healthy fight over how its story is told.

Broadly, the debate is over whether interpretation at monuments and museums and in classroom curriculums should concentrate on celebrating achievements or reckoning with unfulfilled promises. At first glance, this is another symptom of a larger national divide. It need not be. Spirits from the past can spark national reconciliations. For proof, look to the towering monument at Bunker Hill. Or more specifically, see the example of the man who helped lay its cornerstone: The Marquis de Lafayette.

Best remembered as the 19-year-old French aristocrat who crossed the Atlantic at his own expense in 1777 to fight for the American colonists' right to self-government, Lafayette performed a second, lesser-known service to the American republic. At 66, he returned to his adopted country in 1824, during a time of turmoil, reminding a new generation of citizens what they had inherited, what it had cost and what it still required of them.

It is the aging Lafayette who now speaks most urgently to a nation whose freedom he helped win.

The America he traveled across is not entirely unlike today's, despite historians' naming it the "Era of Good Feelings." The years coinciding with James Monroe's presidency were marked by economic depression in 1819 and a sectional crisis preceding Missouri's entrance into the Union in 1821. New technologies, such as steam navigation and advancements in newspaper printing, sped the flow of goods and the proliferation of news, but disrupted America's economy and altered its landscape.

Amid this change and strife, Americans deliberated on Monroe's successor in a presidential election so divisive that some contemporary commentators worried it spelled the Union's end. Then came an astonishing turn: At the invitation of the president and Congress, Lafayette appeared on Staten Island in August 1824. What followed was one of the greatest civic celebrations in American history.

DAVID LA SPINA FOR THE NEW YORK TIMES

A memorial for the Marquis de Lafayette in Massachusetts. His 1824 tour could be dismissed as an early episode of U.S. celebrity culture. That overlooks a deeper meaning.

Over thirteen months, "the Nation's Guest" (as his hosts affectionately called him) traveled to all 24 states while Americans slipped into a delirium, pulling the old hero into their towns at the center of elaborately choreographed parades, honoring him with sumptuous galas and thundering orations. Men wept. Women fainted. Children scattered flowers at his feet. Entrepreneurs peddled Lafayette merchandise. Towns, landmarks, charities and newborns were named in his honor.

It would be easy to dismiss this as an early episode of American celebrity culture. That overlooks a deeper meaning.

His reappearance did not simply stir up unifying nostalgia. It reminded Americans that self-government was an experiment not guaranteed to succeed, while drawing a flattering contrast to the ruined attempt to establish it in France. Reflecting on the precious nature of their liberties, citizens recommitted to opposing those who would abridge them. When Lafayette visited Philadelphia, the city's printers carried a mobile press and

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OPINION

The New York Times
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Today's weed is way too dangerous for teens

Sivabalaji Kaliamurthy

My patient was 14 years old the first time his grandmother drove him two hours to my clinic. He told me he tried weed when he was 8 and had been smoking or vaping it daily since he was 12, often using highly concentrated products purchased from friends or dealers. "It helps me relax," said the patient, who moved in with his grandmother after his mother died and his father was incarcerated.

His life told a different story. Now 16, this young man struggles with persistent depression, failing grades and escalating anger. He had punched holes in walls, been suspended from school and was hospitalized for suicidal thoughts. He's one of many teens I treat whose use of highly potent cannabis has become a destructive force in their lives.

People have been using cannabis for generations, but today the drug is more available, more socially accepted and far more potent than ever. Legalization and decriminalization have brought about rapid changes in the marketplace, and dispensaries around the world now sell plant buds alongside highly concentrated vape cartridges, gummies, edibles, waxes and beverages infused with the psychoactive compound THC. These newer products are specifically engineered to deliver THC in ways that are often more convenient and discreet than smoking cannabis. That shift is especially concerning for adolescents, whose brains are still developing and are more vulnerable to the effects of repeated exposure to high levels of THC.

Are we willing to regulate and enforce cannabis safety, especially to protect the most vulnerable among us?

A few decades ago, the typical cannabis plant contained 2 to 5 percent THC, and the more potent products averaged around 10 percent. Today's cannabis bud products often contain 20 percent THC, while cartridges and concentrates can exceed 70 percent THC. This means the one in four high school seniors who reported experimenting with cannabis in 2025 almost certainly used it in a much more potent form than many people of a previous generation did growing up. And policymakers have done little to protect them.

The world needs a shift in how we regulate cannabis to account for the fact that it is not a uniform product. America's experience with alcohol and tobacco can be instructive. With the help of regulation, public education and changes to how alcohol was taxed, Americans learned that grain alcohol, whiskey and beer carry different risks. With the help of tobacco control, cigarette sales plummeted and the United States made big strides in public health. The same can be true one day for cannabis.

Cannabis products did not become more potent overnight. Advances in agricultural science allowed breeders to create cannabis strains with ever higher THC concentrations. At the same time, innovations in vaping technology made these high potency products without the smell or smoke of cannabis. Market forces accelerated this trend. Higher potency products command higher prices and profit margins, creating strong financial incentives for the cannabis industry to push THC levels upward. Once people use the products daily, they might struggle with significant withdrawal symptoms if they don't use, which drives them back to the dispensary.

In homes, schools and clinics, the consequences of this new marketplace are increasingly visible. Doctors like me who treat children and adolescents are seeing more patients for cannabis-related reasons, including conditions such as cannabis use disorder and cannabinoid hyperemesis syndrome, which causes nausea, vomiting and severe stomach pain. Those patients also can have severe withdrawal related complications and psychiatric symptoms including psychosis, depression, anxiety and suicidal thoughts. The causes of these conditions are complex. But the severity and frequency of these cases are rising, and we have limited tools for prevention and treatment.

A growing body of research suggests that adolescent cannabis use can also affect attention, memory, processing speed and executive function, which are all essential for success in school. These findings are particularly relevant given the unique way THC is metabolized: Unlike alcohol, which is rapidly cleared from the body, THC is stored in fatty tissues and released gradually over time. Adolescents who are using potent cannabis regularly have higher levels of THC in their bodies — a form of prolonged exposure not seen in previous generations. That suggests the cognitive challenges associated with cannabis will only worsen.

Stress, trauma and other underlying challenges clearly contribute to adolescent cannabis use and its mental health consequences, but we cannot treat our way out of an environment saturated with increasingly potent THC products.

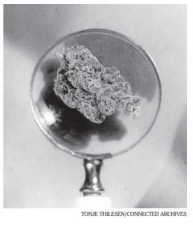
The safest choice for adolescents is to not use cannabis at all. For those who will experiment regardless, the risk should not be amplified by cannabis producers racing to increase the potency of THC in their products.

One way to reduce harm is better regulation. A balanced approach would prioritize safety without abandoning the broader goals of legalization, such as reducing racial disparities in criminal enforcement, eliminating illicit markets, providing adults with safe products and generating tax revenue. Because cannabis is still illegal at the federal level, it's on the states to step up their regulation.

First, states should establish THC potency caps. Alcohol policy offers a useful parallel. Beer, wine and hard liquor are regulated and taxed differently based on strength. Cannabis should be treated similarly.

While the precise cap on THC requires further study, requiring growers to lower the potency to the levels in cannabis products that existed in the 1990s — for example, capping THC at 5 percent for bud products — is a good starting point. Such a reduction would benefit adults, too, especially since daily or near daily cannabis users in the United States now outnumber both daily or near daily cigarette smokers and daily or near daily alcohol drinkers.

Second, labeling and dosing must be standardized across states. Right now, some states require mental health warnings on cannabis products, but most do not and there is no consistency in what information appears on the labels and how prominently it is displayed. Labeling should also include health warnings similar to those on tobacco products, informing consumers about the risk of dependence, the dangers of use during pregnancy, the risks of impaired driving and the heightened vulnerability of young people's developing brains.



TONJE THILESEN/CONNECTED ARCHIVES

Third, we must invest in research. We need better data on thresholds for risk at the population level, as well as more prevention and treatment interventions for adolescents. Fourth, public health messaging must evolve to create awareness about potency and harm.

Adolescents who obtain cannabis illegally will use whatever products they can find, but health policy, when done well, can reduce risk for most people. We do not expect age restrictions, proof of purchase requirements or regulations of alcohol strength to stop all underage drinking, yet those measures have proven to be worthwhile.

The conversation about cannabis in America is no longer just about its legality. The question now is whether we are willing to regulate and enforce product safety, especially to protect the most vulnerable among us. Right now, the answer is no.

SIVABALAJI KALIAMURTHY *is a child and adolescent addiction psychiatrist at Children's National Hospital in Washington, D.C.*

The heroine's journey is a dead end

Susan Faludi

Among the many afflictions distorting our current politics, one has gone unrecognized: We're in the midst of a zero-sum struggle over which gender gets to own the hero's journey, that ancient story formulation in which the hero leaves home, faces monsters and temptations and returns to reclaim his kingdom and his woman from usurpers. In modern times, the question of whether the hero must be male has been contested and recontested.

The fight is about more than a story. We feud over certain foundational myths because whoever owns the myth owns the culture.

It's hard to get more foundational than Homer. Sitting in my local widescreen Cinemark, mid-slog through Christopher Nolan's "The Odyssey," a film that hardly veers from the high-testosterone, man-on-a-quest Homeric template, I was struck by an odd sensation. Hadn't I already seen this movie, but in a different palette?

Indeed I had, in the same theater on another July day three years ago. That version featured a female protagonist who journeys by car, boat, spaceship, bicycle, snowmobile and Rollerblades to a foreign land fraught with perils. She eludes a horde of male suits who want to lock her in a box before returning to her pastel principality to find it besieged by boisterous bros. Both "Barbie" and "The Odyssey" feature a beach battle with flotillas of bowsprit-tipped landing ships and an equine theme, though the horse figure stranded on Ken's beach is fashioned of pink plastic sand. But while the boys of "Barbie" are brawling, the girls regain the kingdom; matriarchy is restored.

To a topologist's eye, Greta Gerwig's "Barbie" and Mr. Nolan's "Odyssey" are the same objects with different shapes. The difference being that hers is suffused in Crayola hues, has wit and grossed more on opening weekend. (Ms. Gerwig and Mr. Nolan seem star-crossed rivals — Barbenheimer, anyone?) The movies themselves are hardly serious enough to serve as philosophical antagonists. Yet as major cultural artifacts only three years apart, they illuminate a serious shift in our society, going far beyond Hollywood. The showdown over the hero's narrative is corroding our political and public life, and disfiguring our government.

PHOTO ILLUSTRATION BY THE NEW YORK TIMES; SOURCE IMAGE VIA WARNER BROS.

THE U.S. GOVERNMENT — all the way to the top. President Trump seems to see himself embarked on a Homeric quest. Tossed from his rightful throne in 2021, he fought his way back and is now wreaking vengeance on the infidels who betrayed him. It's a quest with a modern twist: His rival as he sought to recover the crown was a woman. The patriarch beat her in part by avowing on the campaign trail that he would "protect" women, before continuing his decimation of their welfare once he won. Since Inauguration Day, his administration has been hellbent on reversing women's fortunes at every level.

For a short while — with the 2017 Women's March, #MeToo and outrage over the Supreme Court's Dobbs decision — it looked as though women had seized the hero's mantle; they were going toe-to-toe with adversaries from a grab-'em-by-the-pussy prez to a priapic studio head to a Supreme Court injustice. In the heady moment of Brat Summer (before Kamala's Fall), it seemed as if the heroine's journey might even end in victory. Until the revanche. "The cavalry has arrived," Elon Musk proclaimed on Election Day 2024. "Men are voting in record numbers." (Well, actually not.) How did everything change so suddenly? Or, to quote Barbie: "This is Barbieland! The Barbies worked hard and dreamed hard to make it everything that it is. You can't just undo it in a day." Oh yeah?

The hero's struggle resonates so universally because we're all up against monsters of one sort or another. The monomyth promises to turn our mundane muddles into noble quests. That's what's at stake in the zeitgeist shift between "Barbie" in 2023 and Nolan's 2026 he-man travelogue: Which sex gets to own that ennobling elixir? The battle is not to be found within the films themselves — which characters win or lose — but between competing claims to the archetypal story. The fight has been re-genderized. It's no longer Menelaus fighting Paris for the possession of Helen — it's Menelaus versus Helen. Or Odysseus versus Barbie.

Or Pete Hegseth versus Lisa Franchetti.

Nowhere is the administration's war on women more evident than in the military itself. Admiral Franchetti, the Chief of Naval Operations, was one of the early high-profile female casualties of Mr. Trump's new Department of (Trojanesque) War. Women in the military are being punished systematically: their promotions denied, combat capabilities impugned, achievements scrubbed from official websites, the longstanding committee to integrate women into the military shut down and the ceremony to honor their fallen canceled. The most dramatic purges have come at the top, to women who've already completed their hero's journeys, who've left home, gone abroad, fought their battles and returned to claim their laurels and rightful posts. Only to be met by Secretary of Defense Hegseth's Antinous.

BETWEEN 2000 AND 2018, the number of female generals and admirals had doubled. Now, thanks largely to Mr. Hegseth, the modestly decorated (mostly with tattoos) Army National Guard major and former TV host turned warlord, there are no four-star female officers on active duty in any branch, and no female candidates on the roster of likely four- or three-star appointments. (He's also turned his sights on troops who are Black or transgender.) A New York Times analysis this month found that women's nominations to high-ranking posts in the military are at their lowest level in a quarter century. This year, for the first time in a decade, there will be no women nominated to be admirals. (Evidently, women can still aspire to humbler posts like captain or major — women's nominations to lower-level ranks rose in the past year.) Who are these veteran female officers relieved of their commands by the "central casting" (Trump's words) matinee idol with the gelled hair and pocket hankie, the face that launched a thousand missiles?

"The Odyssey" and "Barbie" show a zeitgeist shift that goes beyond Hollywood: The hero's narrative is corroding our political and public life.

Well, for starters, just in the Navy — Admiral Franchetti: rose from surface warfare officer to command the Sixth Fleet; first woman to lead the Navy and the first permanent female member of the Joint Chiefs of Staff; 40 years of service. Fired from her post, no explanation. Replaced by a man.

Vice Adm. Shoshana Chatfield: commanded the Helicopter Sea Combat units; first female president of the Naval War College and the only woman on NATO's Military Committee; 37 years of service. Fired from her post, no explanation. Replaced (in an acting capacity) by a man.

Vice Adm. Yvette M. Davids: veteran of Desert Shield, Desert Storm and the Iraq war; commanded a carrier strike group; first woman and first Hispanic officer to head the U.S. Naval Academy; 36 years of service. Relieved of her post, no explanation. Replaced by a man.

Adm. Linda Fagan, Coast Guard; Vice Adm. Nancy Lacore, Navy; Col. Julie Sposito-Salceies, Air Force; Lt. Gen. Telita Crosland, Army; and on and on. These women didn't claim heroic status; they embodied what the military has traditionally valued: service, teamwork, courage, dedication. But in terms of their mythic warrior life journeys, they are among our Odysseuses. And their elevation has enraged some Odyssean wannabes eager to enshrine what Mr. Hegseth calls "the highest male standard."

PHOTO ILLUSTRATION BY LISA SHEEHAN

In his book "The War on Warriors," Mr. Hegseth maintained that so-called D.E.I. hires have made the military weak and "effeminate." The "standard," though, has nothing to do with military effectiveness. Were Admirals Franchetti and Chatfield, General Crosland and company fired for not being good enough? Or for being too good, with skills and experience that threatened the restoration of a masculinist culture? Small wonder the photos of Mr. Trump's cabinet meetings — especially after the departures of Pam Bondi, Kristi Noem, Lori Chavez-DeRemer and Tulsi Gabbard — have begun to resemble the shipboard scenes in "The Odyssey": men seated around the edge of a long wooden ellipse, with a board table standing in for a galley deck. Pull, boys, pull!

MR. TRUMP'S RETURN TO POWER resembled a sack of Troy — with women getting the sack. A National Women's Law Center report found that DOGE's mass layoffs targeted departments with a "substantial majority" of female employees, though the civil service overall leans male. Hardest hit were Black women, especially with college and advanced degrees, whose overall employment rate last year suffered one of the sharpest one-year declines in a quarter century. After Mr. Trump fired the two Democratic female commissioners and the female general counsel of the Equal Employment Opportunity Commission, its new leadership urged white men to file discrimination suits, and the agency sued a Coca-Cola distributor for excluding men from a women's forum. Information on reproductive health, maternal mortality, employment equity and sexual violence began disappearing from government websites, along with women's historical contributions and the words "women," "female" and, of course, "feminism." NASA employees reportedly received a "drop everything and reprioritize your day" advisory instructing them to delete by 5 p.m. "anything specifically targeting women (women in leadership, etc.)." The administration that insists "there are only two genders" seems determined to make it only one.

Also gone: data collection on women's advancement, or the lack thereof. The E.E.O.C. voted to toss out the agency's 60-year-old requirement that companies file annual work force demographic reports, claiming it burdened corporations. Is it any mystery that women have lost ground in corporate leadership two years running and their representation on corporate boards declined in the first quarter of 2026? Or that women constituted 100 percent of the decline in the labor force in December 2025, then again last month, bringing the total net job loss for women this year to 845,000? None of these women got their jobs, or lost them, because they were seen as heroes. Nevertheless, they were collateral damage in the custody fight over the hero's journey.

That fight has filtered down to saturate workaday lives. Starting in the post-9/11 hero frenzy and accelerating in the "peak woke" era of the early 2020s, more and more ordinary struggles have been deemed heroic. For a while, thanks to feminism, women enjoyed an advantage in garnering those commendations. They didn't just become firefighters or telephone linemen. They'd slain the Cyclops of sexism. Not to gainsay their grit, but their lionization came with a cost. The kudos over every valiant ascent excited the anger and envy of some men who, if they became telephone linemen, became . . . telephone linemen. In "Barbie" terms: just Ken. The backlash isn't simply about who gets to do the job — it's about who gets glorified for doing the job. Witness Mr. Hegseth's book with its repeated fulminations about service-women showcased as heroes by a "military P.R. machine, looking for a 'first.'"

Diversity measures were created to open up pragmatic, incremental opportunities for people long deprived. But there is nothing pragmatic or incremental about being a hero. The right sees D.E.I. as a plot to dethrone the men who once stood on Mount Olympus. For its part, the left employs the hero mythology to validate its causes, and uses journeys out of persecution, abuse, every misfortune from A.D.H.D. to PTSD, to place its contentions beyond debate and stamp even well-meaning dissenters as intolerant. The right has its own hero-martyrs. It's a strategy to be wary of. When Purple Hearts become Medals of Honor, when suffering is conflated with valor, critique is relabeled as heresy. Surely not every victimhood drama has engendered a fascism, but every fascism has used a core myth of injustice and injury to justify its absolutism and brutality.

The purpose of civic society and government — in the democratic world, anyway — is to serve the unheroic needs of ordinary people. Not to make a mess of their lives on the way to staging a cage fight on the White House lawn. Or to assert personal virtue through a megaphone. One raised fist begets another.

FALUDI, PAGE 11

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What Lafayette's 1824 tour can teach Americans

COLE, FROM PAGE 9

handed out broadsides reading "Freedom of the press protects all other freedoms."

"Memories of the Revolution have come back to life," Lafayette observed in the midst of the jubilation. As the nation approached its 50th anniversary, the Frenchman represented a living bridge across time, inspiring citizens to curb their partisan passions and honor a shared past. "I have the satisfaction of thinking that my presence has had a great reconciliatory effect between the two parties," he wrote, "men who have not spoken to each other for over 20 years are brought together."

Other Americans engaged in a useful philosophical exercise when it came to Lafayette himself. Observing some of their compatriots hurl themselves at his feet, or propose skirting the Constitution and naming him vice president, they questioned how public figures ought to be honored, even for the most valuable services. There was a fine line between saluting and idolizing Lafayette. Some of the festivities, the publisher Hezekiah Niles observed, were "hardly to be restrained within the bounds of propriety — as if it would cause many to forget what was due to themselves and the general."

But tributes were due. Not only to Lafayette. Early Americans were well aware of a centuries-old adage that republics were ungrateful. In their vigilance over liberty, self-governing people were prone to forgetting their benefactors. Americans were determined to disprove the ancients.

To do so, Congress gave Lafayette, whose finances were in disarray, a gift of $200,000 (about $7 million today) and a township of land in Florida for his services in the Revolution. Other veterans, many of whom went without pensions, settled for the roar of the crowds as they stood alongside Lafayette. The dead were honored, too, as communities capitalized on Lafayette's visit to raise funds for building monuments to Revolutionary heroes. The inception of the largest of these is what brought Lafayette to Bunker Hill in the summer of 1825.

Drawing donations and spectators from across the country, the project was one of the first national memorials to America's fallen soldiers, a reminder of what they had died for: equality, representative government and popular sovereignty.

Though not the conclusion of Lafayette's tour, Bunker Hill was the culmination. The granite obelisk begun that day, and finished in 1843, was a means of using history to provide civic instruction and emphasize union for future generations.

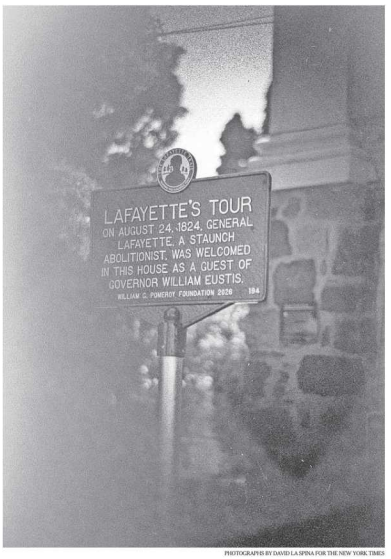
Here, Lafayette marveled at great advancements — a spreading population, rising arts and industry — made possible by the Revolution. "It surpasses my imagination," he wrote to a friend shortly after arriving in New York. But Lafayette took note of and made clear his displeasure where the ideals he fought for were suffocated.

"There is only one issue for which I am less resigned than ever," he wrote from New Orleans, "and that is slavery and anti-black prejudice." He admired what America had accomplished without pretending the revolutionary promises had been fully realized.

This is a useful aperture through which to view our current debates over history. A national narrative stressing successes fosters an important sense of civic pride. But only by examining its inconsistencies and mistakes can the Republic live up to its founding principles. That citizens feel passionately about their respective sides is evidence they still value the ideals fought for at Bunker Hill. And rather than mutually exclusive, the two approaches are linked and essential for shared understanding of the past. After all, the resolution, often through incredible struggle, of seemingly intractable contradictions — like those that worried Lafayette — are among the greatest parts of America's story.

No Lafayette will appear to us today, but the story of his last service to America still offers timely reminders to its citizens. Our rights must be exercised lest they atrophy, our institutions safeguarded, even when they frustrate our goals. Gratitude is owed those who won and protect both. Recollections of a common past can temper current passions, if we eschew the notion that American history is either all progress or all oppression.

RYAN COLE *is the author of "The Last Adieu: Lafayette's Triumphant Return, the Echoes of Revolution, and the Gratitude of the Republic."*


LAFAYETTE'S TOUR
ON AUGUST 24, 1824, GENERAL
LAFAYETTE, A STAUNCH
ABOLITIONIST, WAS WELCOMED
IN THIS HOUSE AS A GUEST OF
GOVERNOR WILLIAM EUSTIS.
WILLIAM C. POMEROY FOUNDATION 2020 184

PHOTOGRAPHS BY DAVID LA SPINA FOR THE NEW YORK TIMES

From left, Charles Ingham's 1825 portrait of the Marquis de Lafayette in Albany, N.Y.; a plaque commemorating the aristocrat's 1824 tour of the United States in Roxbury, Mass.

The Barbie backlash

FALUDI, FROM PAGE 10

Mr. Nolan's "Odyssey" comes to an awareness, banal though it may be, of the hero's moral peril. Matt Damon's Odysseus is guilt-ridden over his leading role in the destruction of Troy, a violation of xenia, Zeus's law of hospitality. In Homer's original epic, the reckoning is more existential. Odysseus tries to console the despondent ghost of Achilles, now in Hades, telling him the Greeks "honored you as a god" immortalized by brave deeds. Achilles retorts, "By god, I'd rather slave on earth for another man — some dirt-poor tenant farmer who scrapes to keep alive — than rule down here over all the breathless dead." It's a desire that Odysseus shares. When Calypso offers him eternal life if he will remain on her island, he refuses. He'd rather go home to his wife and family — and lead a mortal's existence.

That immortality offer disappeared from Mr. Nolan's script but was present in Ms. Gerwig's. In the finale, Barbie can opt to remain a timeless toy in Barbieland, waking up forever in her Dreamhouse to her "best day ever." But she is determined to return to the real world, to become an ordinary adult woman with all the difficulty, messiness and mortality that implies. However convenient or trite such movie sentiments may be, they are instructive. They suggest there's another way to end the story. Can we free our civic life from heroic imperatives, return our governance to the humble and the human? The object of any healthy politics is not to win but to prosper. We are all soldiers in that quest, and none of us heroes.

SUSAN FALUDI *is a journalist and the author of "Backlash: The Undeclared War Against American Women" and, most recently, "In the Darkroom."*

CORRECTIONS

• An article on Aug. 21, "How Brazil is charting its own path," misstated Brazil's area ranking among nations. It is fifth, not sixth.

• An article on Aug. 20, "These protesters were charged with terrorism. Who's next?," misspelled the surname of a lawyer at the Center of Constitutional Rights. He is Shayana Kadidal, not Kadilal.

Anthropic stole this from me

GRAEBER, FROM PAGE 1

For a writer like me, who spent about 14 years researching and writing two books, that money is hardly life-changing. But in legal circles, it was considered a big win, four times the most common per-work penalty for illegal downloads.

For Anthropic, stealing was a smart business expense.

In 2021, Anthropic was a late but ambitious entrant to the A.I. race. Its goal, according to the fair use order in our case, was to create an artificial intelligence capable of writing that "an editor would approve of," and that consumers would pay for.

Such a chatbot couldn't be trained on mere tweets and trolls. It would need to mimic quality human writing at an industrial scale.

The Anthropic founder and chief executive Dario Amodei wanted to avoid the "legal/practice/business slog" of buying and licensing the books the company needed. Stealing was faster and cheaper. The price of virtue was deemed too high. Instead, the company is expected to be valued at $2 trillion in its looming I.P.O., which would make it the largest in history.

But the problem of stolen material won't go away.

For many authors, it's potentially ruinous. And this is where an A.I. famine could have its roots.

We had hoped our case would help confirm the protections of copyright in the age of A.I. and the rights of artists and creators to control their own work. And we hoped a judge would rule that our life's work, in whatever form, was not a free natural resource that could be taken against our will and used to compete with us, if not put us out of work.

The model collapse scenario threatens to wipe out whatever gains chatbots like Claude enjoyed from being trained on books in the first place.

That did not happen.

Another judge in the same California district court disagreed, pointedly calling the analogy between for-profit mimic machines and ambitious schoolchildren "inapt" and casting doubt on the ruling.

There will be other cases, and other judges with other opinions. This question is far from settled. It will be kicking around the courts for a long time.

Claude was built and may still be training on our copyrighted books. I'm not aware of any major A.I. companies doing otherwise.

For several years, authors have had a sense that the harm caused by unlicensed training on books had a negative impact on their livelihoods. A working paper published this month looked at more than 14,000 books sold on Amazon between 2023 and March of this year, putting that harm into hard numbers.

The paper found that the book market has been increasingly flooded with A.I. slop that has financial implications for publishers and authors. The slop confuses consumers and may mess up best-seller lists. Increasingly, even "human-authored" books are contaminated with A.I.-produced material.

For authors, "market dilution" by A.I. slop will result in loss of sales and income. It's bad and getting worse. The median income of a full-time author is about $20,000. There's not much further to fall.

But sadly, it's the A.I.s that may suffer the most. A.I.s can't keep improving by training only on A.I. output. The model collapse scenario threatens to wipe out whatever gains chatbots like Claude enjoyed from being trained on books in the first place.

And fewer working authors mean fewer original, A.I.-free books. For a ravenous A.I chatbot, this is a potential death spiral. For both authors and Anthropic, it's a future we should work together to avoid.

One day, hopefully, copyright protections will be extended to prevent the unlicensed training of A.I.s.

Until then, we live in a legal gray area, in which giant cash-rich corporations gorge freely on the rights of individual creators. The big ones will continue to eat the little ones unless the little ones can band together.

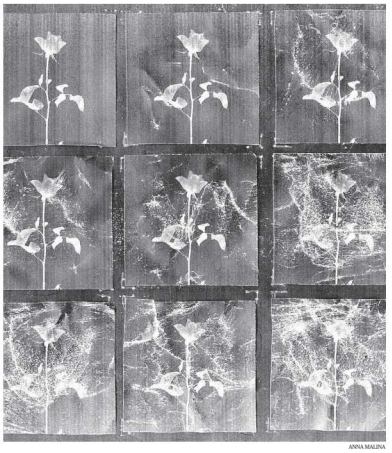
It's up to us to demand legislation extending copyright protections in the 21st century. Many members of Congress appear willing; property protections have appeal for both sides of the aisle.

Affirming those copyright protections to include A.I. might even force A.I. companies to hire human writers to create original works for their L.L.M.s to train on. Or perhaps they'll start spending their treasure like modern Medicis, funding the quality work A.I.s need to stay sharp. At the very least, they might invest in publishing houses and writing programs, fending off model collapse while ushering in a Silicon Era of artistic enlightenment.

I worry for this generation of artists coming of age in yet another technological adolescence, on the brink of so many cultural and economic disruptions.

But I do not worry for the future of art itself. We will always need human mediators to translate the human experience and make the flesh word.

CHARLES GRAEBER *is an author.*



ANNA MALINA

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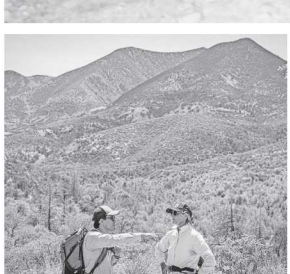
SCIENCE

Politics threatens jaguar migration

Border wall construction impedes species' return to historical range in U.S.

BY DOUGLAS MAIN

GANESH MARÍN/CONSERVATION SCIENCE PARTNERS



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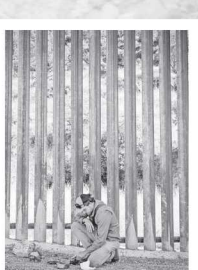


CELIA TALBOT TOBIN FOR THE NEW YORK TIMES

UNIVERSITY OF ARIZONA WILD CAT RESEARCH & CONSERVATION CENTER

A jaguar in the Sonoran Desert south of the U.S. border, top, captured by a trail camera in 2023. Above, from left: Ganesh Marín, at left, and Valerie Gordon in the Cuenca Los Ojos wildlife preserve in Mexico; Eamon Harrity, a conservation science researcher, checking a wildlife camera at the border; and Cinco, a male on the U.S. side without a mate.

Movement triggers a trail camera in a wildlife preserve in northern Sonora, Mexico, near the border with the United States. It captures two adult jaguars winding through oak thickets and tall grasses. The cats look relaxed, softly vocalizing to each other.

It's remarkable to see any jaguars in these borderlands. But to observe two together is unheard-of, said Ganesh Marín, a researcher with the environmental group Borderlands Restoration Network. Even more jaw-dropping is that one of the big cats looks to be a female. "When I saw it, I was excited," Dr. Marín said of watching the video in 2023. "I thought, This is fantastic."

No native female jaguars have been seen in the United States, or anywhere particularly close, for over 70 years. So Dr. Marín waited for more evidence before he went public. He collected several more sightings of the cat, which he and his adviser named Adela. Then, this year, a camera-trap video surfaced that gave a clear view of another jaguar's rear end, proving, according to Dr. Marín and other cat experts, that the individual in question is a female.

"It's a game changer," said Eamon Harrity, a researcher with Sky Island Alliance, a conservation science group.

Including Adela, five or six jaguars have been recorded at the wildlife preserve, Cuenca Los Ojos, since 2020, suggesting that the jaguar is closer than previously thought to re-establishing a population on the doorstep of the United States. "It totally deflates the narrative that female jaguars are over 100 miles to the south," (160 kilometers) Mr. Harrity said. "They could be a day away from the U.S., or already here." At the same time, the only known jaguar in the United States, a male named Cinco, has been roaming throughout southern Arizona. He has everything he needs — except a mate.

And geopolitics might get in the way of his acquiring one. Since 2025, contractors working for the Department of Homeland Security have finished 56 miles of new wall along the U.S.-Mexico border and 48 miles of secondary fencing. In Arizona, many areas of the border will soon have two 30-foot (nine-meter) walls right next to each other. This barrier is poised to cut off three of the four most important remaining wildlife corridors between Mexico and Arizona, threatening the jaguar's re-expansion despite all the positive recent signs. The wall, Mr. Harrity said, would make it "very unlikely the jaguars can come back on their own to the U.S. — at least for now."

A MYTHIC PRESENCE

Jaguars once roamed much of Sonora, western New Mexico and Arizona, as far north as the Grand Canyon. The size of the population is unknown, but it was probably small and widely dispersed. Though they have long been revered in both countries — the naturalist Aldo Leopold wrote in 1949 that the jaguar's mythic nature so pervaded the borderlands that "no campfire dies without talk of him" — jaguars were also once regularly killed on sight, by government officials as well as hunters.

Since 1949, when a hunter killed a female jaguar near Arivaca in southern Arizona, no native female had been seen in the United States, or anywhere particularly close to the border in Mexico. The northernmost core breeding population was thought to be centered near the community of Sahuaripa, more than 100 miles south of the border, which includes a private protected area for the species called the Northern Jaguar Reserve.

A turning point came in early March 1996, when the rancher Warner Glenn set off to hunt cougars in the Peloncillo Mountains, which start at the Mexican border and run north, straddling Arizona and New Mexico. His dogs caught the scent of a large cat and gave chase, and the feline finally stopped on a rocky outcropping. Peering up through pinyon pines, the rancher realized this was no mountain lion; it was a full-grown male jaguar.

Still, in 1997, with only a few such sightings of roaming males, the jaguar was listed as endangered. In 2014, the U.S. Fish and Wildlife Service designated over 760,000 acres (3,000 square kilometers) of critical habitat for the big cats, but after lawsuits from mining and ranching groups, that dropped to 640,000 acres.

Soon after Dr. Marín set up the camera network in 2020 for a doctoral project at the University of Arizona, he was elated to record a male jaguar he named Bonito, and a second male shortly after. Then came Adela and yet another male in 2023.

When Dr. Marín first saw the video of the two jaguars, he thought Adela was female because she has a smaller frame. Also, two males are unlikely to appear together and vocalize, he explained.

This year, he reinspected a video from April 2023 that showed a clear view of a jaguar's rear end, and did a double take: No testicles were visible. And the spot pattern looked different from Adela's, suggesting it could be a second female.

He sent the clip to Brett Dickson, a wild cat expert with Conservation Science Partners. "I was struck right away that I was likely looking at a female," said Dr. Dickson, who forwarded the video to jaguar experts. (The video also shows the cat has skin folds that look like mammary glands. The possibility that this could be a lactating female "cannot be ruled out," Dr. Dickson said.) Seven of the nine scientists agreed it was female; two are unsure.

While male jaguars can range hundreds of miles from their birthplaces in search of new territory and mates, females generally do not travel as far from where they were born, and their mobility is a limiting factor in the species' expansion. Seeing a female in Cuenca most likely means that she was born nearby and that the breeding range of the jaguar extends farther north into the species' historical territory than previously thought.

"CLOSER THAN WE THOUGHT"

To revisit the spot where Adela first showed up, Dr. Marín and Valerie Gordon, the executive director of Cuenca Los Ojos, drove into the northernmost foothills of the Sierra Madre. A hike through grassy hills punctuated by oaks and mesquite took them to a spot where Dr. Marín lashed a camera around an alligator juniper back in 2020.

Under two miles away they pointed out the vehicle barrier on the U.S. border. This is one of the most important remaining unwalled wildlife corridors in the Southwest United States, Dr. Marín said.

A walk into the mountains took them to another camera that filmed Adela, showing her softly huffing as she passed. Dr. Marín gestured southward, where he envisions female jaguars making up a continuous thread that stretches vast distances through Mexico and far beyond. "The fabric of the jaguar is closer than we thought," he said.

Under the first Trump administration, 30-foot fencing impervious to most large animals went up along over 220 miles of the border in Arizona, curtailing north-to-south wildlife movement and depleting aquifers, since contractors use vast quantities of water for construction, said Myles Traphagen, a researcher with Cuenca. As codified in the Real ID Act of 2005, the homeland security secretary has the authority to waive nearly any law — including the Endangered Species Act — in building border walls.

John Mennell, a D.H.S. spokesman, said in a statement that the department planned to incorporate an unknown number of small wildlife passages, and referred further questions to the Fish and Wildlife Service, which declined to comment. These openings are 8.5 inches by 11 inches (22 centimeters by 28 centimeters), too small for jaguars.

Cameras on both sides of a 30-foot border wall in Cuenca Los Ojos have shown large wildlife pacing, trying to get through. Animals including bears, mountain lions and jaguars have to move long distances to find water in arid areas, and border fencing makes this more difficult, Ms. Gordon said.

In the spring, Mr. Traphagen took a drive to check on the status of the wall, passing through the Baboquivari Mountains, a sacred place within the Tohono O'odham Nation. To the south, he saw contractors putting up 30-foot panels of new wall.

Physical barriers are poised to cut off three of the four most important remaining wildlife corridors into Arizona.

"That corridor has been open since time immemorial," said Kinley Ragan, a biologist with the Phoenix Zoo, who manages a network of cameras in the area. "We know this will have serious impacts on wildlife."

Several groups have worked to protect jaguars in Mexico, where the species is listed as endangered. For example, to change attitudes and make the animals more valuable alive than dead, the Northern Jaguar Reserve started a program in 2002 that compensates ranchers for trail camera photos of cats.

Since 2010, jaguar populations have increased throughout Mexico by about 30 percent, to a total of over 5,300, according to a Mexican jaguar census released last year and led by Gerardo Ceballos, an ecologist and a senior researcher at the National Autonomous University of Mexico.

Among the main threats have been illegal hunting and retaliatory killings for perceived cattle predation, though research shows the cats much prefer native wildlife. The situation seems to have improved over the last two decades. Dr. Ceballos has argued for years that a female jaguar could return to the United States soon, if the two countries continue working together to protect habitat and connectivity.

While jaguars might not be welcomed back by every segment of society, they are rare and shy enough that they present no risk to humans.

The return of an apex predator would be good for the area's ecology and an indicator that the environment is doing well, said Susan Malusa, director of the University of Arizona wild cat research center.

Females would enjoy the same legal protection as males, as endangered species, but ecologically and symbolically the return of females would be a much bigger deal and would make jaguar conservation more urgent, rather than theoretical.

Back at the spot where the first video was taken, Dr. Marín noted how important it will be to keep this border free of 30-foot walls, while re-establishing wildlife corridors where possible.

"Jaguars are coming back," Dr. Marín said, if we don't get in their way. "I hope the U.S. is prepared for that — prepared to let that happen."

An unexpected path to fatherhood opens for many

New technology finds 'hidden' sperm in men thought to be infertile

BY ANDREW ZALESKI

PHOTOGRAPHS BY ELIAS WILLIAMS FOR THE NEW YORK TIMES

Dr. Zev Williams of the Columbia University Fertility Center in Manhattan shares better news lately with hopeful fathers. Above right, a glass plate to hold sperm samples.

The hardest part of Dr. Zev Williams's job as a fertility physician is telling a man: "You're not going to be a father."

Male infertility contributes to up to 40 percent of all infertility cases worldwide. While a typical semen sample contains hundreds of millions of sperm, men with azoospermia, which affects about 10 percent of all infertile men, have zero or very few sperm in a sample.

Some cases are known as obstructive, in which a fixable blockage prevents sperm from getting into semen. Other cases are nonobstructive, where the biological machinery for generating sperm is broken, and the chances of fathering children plummet.

"That is really one of the most heartbreaking, devastating and surprising diagnoses you can give to patients," said Dr. Williams, the director of the Columbia University Fertility Center in New York.

Lately, however, he is sharing encouraging news with hopeful dads. For men with extraordinarily low sperm counts who have been considered azoospermic, sometimes several "hidden" sperm are present. Analyzing a sample under a microscope with the human eye often misses these individual sperm cells. Now, some of these men are benefiting from a novel technique developed by Dr. Williams and his team at Columbia called the STAR system.

Much in the same way that astronomers use machine-learning algorithms to uncover new objects in the night sky, STAR — Sperm Tracking and Recovery — uses artificial intelligence to locate difficult-to-find sperm.

Samples of semen are introduced by syringe into a microfluidic chip the size of a stick of gum, where the sample flows through a channel thinner than a human hair. As it passes through the channel, a high-powered magnifying lens connected to a high-speed camera takes about 300 images per second. The whole setup is connected to a computer, where A.I. quickly assesses those images. If the A.I. tool spots a sperm cell, it prompts the computer to open a small side valve on the microfluidics channel in which the cell is captured.

"When you look with your naked eye at night, you can find a lot of stars," Dr. Williams said. "But using a telescope reveals a ton more. That's what this is doing. It's giving us an ability that is beyond what a human is typically capable of."

Usual methods to find sperm cells in suspected cases of azoospermia involve manually looking through the ejaculate under a microscope. It's tedious work. Scanning a single sample can take about eight hours to complete, and technicians sometimes can't find sperm, even if they're present. That's because ejaculate contains billions of bits of cellular debris. For men with millions of sperm in their samples, that isn't a problem. But for men whose samples may have as few as two or three sperm cells, finding them within that cellular clutter is a fool's errand.

Urologists might go an extra step and order an outpatient procedure called a micro-TESE to slice open the scrotum and look in the seminiferous tubules of the testes, where sperm are created, to see if they can locate sperm cells. Sometimes they do. Sometimes they don't.

The STAR system, which took about seven years of development, rolled out officially in late 2025 at Columbia's fertility center. An article co-written by Dr. Williams and published in The Lancet last November tells the story of a couple who experienced 19 years of infertility. Sperm were found after the 39-year-old man's sample was run through the STAR system, and that couple now has a baby girl.

In another instance, a patient's micro-TESE sample was searched over two days with no sperm found. The STAR system, on the other hand, found 44 sperm cells in that same sample in one hour.

Across 175 cases, the STAR system has found and recovered sperm 26 percent of the time. From there, the normal process of in vitro fertilization takes place. Dr. Williams said there was currently a pregnancy in progress that was made possible after STAR found just two sperm in a man's semen sample.

What the STAR system can't fix are cases of azoospermia in which men have no sperm at all — a concern that has become more prevalent over the last decade. Researchers are split as to whether sperm counts are dropping since findings of a major meta-analysis published in 2017 argued that sperm counts among Western men had halved over 40 years.

Shanna Swan, a professor of environmental medicine and public health at Mount Sinai school of medicine in New York City and a co-author of that study, has argued that if the trend continues, most couples might require assisted reproduction by the middle of this century. "Spermaxxing" is now a term du jour in the online wellness community. Other studies, like one published by urologists at the Cleveland Clinic in 2025, found no change in sperm concentrations among fertile American men over the last 50-plus years.

"The truth may still be somewhere in between, but I think more and more people, myself included, are willing to believe that there's a problem," said Dr. Alexander Pastuszak, a board-certified urologist and chief executive and co-founder of Paterna Biosciences.

This past year, Paterna, based in Utah, claimed that it successfully grew human sperm in the lab. According to Dr. Pastuszak, company scientists took stem cells from testicular tissue — the germ cells destined to become sperm — and added a proprietary mix of molecules and chemicals to a petri dish to coax those cells into becoming fully fledged sperm. Third parties have yet to duplicate the results, which have not yet been published in a peer-reviewed journal. But it could very well represent a milestone in reproductive biology.

"It solves the problem of men who don't make sperm," Dr. Pastuszak said. "These men still have all the germ cell precursors. They just don't make sperm efficiently."

Until lab-grown sperm are available, techniques like the STAR system will continue to fill in the gaps. Currently it's available only at Columbia University, with a dedicated team of experts operating three systems. Ultimately, the goal is to create a more automated system that other fertility centers can use.

"With zero sperm, you effectively are giving up the hope of a biological child," he said. "With one sperm, you could envision the child, the grandchildren, the great-grandchildren. It's just such a profound moment when you find and recover that sperm."

Sports

Short of funds, LIV Golf faces uncertain future

WESTFIELD, IND.

Without Saudi support, breakaway tour is now fighting for its survival

BY BRODY MILLER
THE ATHLETIC

When it was all over, as the multimillionaire golfers prepared to pop champagne bottles and celebrate $8.4 million in winnings, Tyrrell Hatton ducked behind his teammates and walked away to avoid the sprays. He made his way down the stairs, and when it was time for the LIV Golf season finale team championship news conference, he and his teammates made it clear that they needed to keep this brief. They had a plane to catch.

If it turns out that this was it, if this multibillion-dollar lightning bolt of a league's final moments came in a country club in the Indianapolis suburbs, there were no signs of sentimentality.

The players did not come together to embrace the shared four-year journey against the machine. There were no tears or emotional reminiscing. To the naked eye, this was just a regular season-ending golf tournament — one with a pretty good fan turnout and a $40 million purse courtesy of benefactors no longer involved.

LIV 1.0 ended on Sunday at The Club at Chatham Hills. That much we know for sure. Whether 2.0 will ever properly launch remains unknown.

The league's original catalyst, Phil Mickelson, has not been seen in five months after allegations against him of unwanted sexual advances.

The league's biggest star, Bryson DeChambeau, shook hands, drank an energy drink and kissed his girlfriend before leaving, telling the LIV broadcast, "There's something fun coming."

The league's best player, Jon Rahm, calmly celebrated another individual season title and said that all he was thinking about was his fourth child — due in October — and his desperate need for a haircut.

And then, Rahm's teammates left to catch flights back to Europe, leaving golf waiting to see what happens next.

In the merchandise tent at the beginning of the week was a shirt with ransom-note-styled letters declaring an on-the-nose proclamation: "Golf's not dead."

Not far from the tent was the man doing everything in his power to ensure that LIV's demise does not happen. Scott O'Neil, the league's chief executive, roamed the first tee box hugging each LIV employee he saw, often hanging on for a few extra moments.

To much of the golf world, LIV Golf died when Saudi Arabia's Public Investment Fund pulled its support in April. To others, it will be declared over sometime this fall, when certain players leave or potential deals fall through. Only the true believers spent Sunday talking about how they will all see each other again next season.

O'Neil does not use the word "bankruptcy" in the LIV offices. He does not directly concede it in press settings. While it is understood that bankruptcy is part of the most likely path forward for LIV's survival, according to people who spoke on the condition of anonymity because they were not authorized to speak publicly, it is also understood that bankruptcy means pain.

It means that employees lose their jobs. It means that unpaid vendors get cents on the dollar (at best). And while nobody is losing sleep over the well-being of millionaires, it means that players will probably have to choose between taking equity in LIV 2.0 or forfeiting large chunks of what the league owes them.

O'Neil's persona is one of brash confidence, not unlike his predecessor, Greg Norman. But while Norman initiated a battle cry of LIV against the world and antagonized everyone in the process, O'Neil is more of a schmoozer. He is a seasoned executive, ready with an anecdote for each setting and a joke for each handshake.

The Saudis are gone, and essential elements have changed. LIV Golf is no longer able to instill fear in its rivals.

To see O'Neil after he stepped away from the cameras is to see a man coming to terms with all future scenarios. The smile fades into a sigh. The shoulders sag.

"You can see it on his face and him," one golfer, Charles Howell III, said. "It's obviously taking a toll."

Bankruptcy decisions are out of O'Neil's control, more up to the Public Investment Fund than the league itself. Any future is dependent on a deal with investors, and any deal is dependent on keeping star players like DeChambeau and Rahm. But those players will probably not commit until they know what the future looks like — if they want to commit at all — and O'Neil cannot negotiate media rights deals until he has a new investor. So the cycle goes on and on.

On top of that, the DP World Tour, formerly the European Tour, continues to threaten the reinstitution of fines for LIV golfers playing conflicting events next year. That directly endangers O'Neil's pitch of a limited 10-event LIV schedule in which players are free to fill out their campaigns elsewhere.

It doesn't help that questions already are rising about LIV's top players.

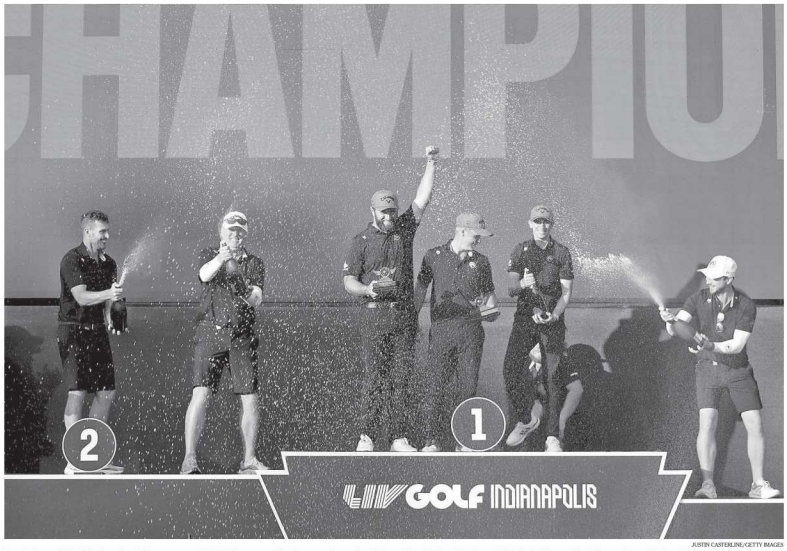
DeChambeau has not publicly signed beyond this season, but he seems the most committed to what comes next. Rahm's approach has not been nearly as certain, but as long as he is under contract with LIV, he is not eligible to communicate with the PGA Tour about any potential return.

While O'Neil and LIV sources deny any clear deadline, there is no arguing that clarity is needed soon. Players cannot and will not go deep into the fall not knowing what their professional golf future is, and it's unlikely that LIV can survive if it doesn't have funding secured on the same time frame.

If it does survive, it will be a heavily toned-down experience, with smaller purses, reduced buildouts compared with the Saudi-backed extravagance, and an entirely smaller mission statement.

No longer is LIV trying to usurp the PGA Tour as golf's hegemonic power. O'Neil has minimized his goal to a far simpler question.

"Can LIV add something valuable to golf?"



JUSTIN CASTERLINE/GETTY IMAGES

Jon Rahm raising his fist after his team won LIV Golf's season finale team championship at The Club at Chatham Hills in Indianapolis. It is unclear whether LIV will relaunch.

JORDAN BANK/GETTY IMAGES

Scott O'Neil, LIV's chief executive, has sought to avoid the word "bankruptcy."

This league arrived with pomp and controversy. It represented perhaps the strangest time in golf history, a civil war that split the professional game into pieces right as the broader sport was becoming more popular than ever.

Jay Monahan, the outgoing PGA Tour commissioner, called that version of LIV Golf an "existential threat," one that seemed to have the money to slowly bleed out the PGA Tour.

There were flash mobs, big-name signings and lawsuits. There were U.S. Senate hearings and framework agreements. At one point 18 months ago, this all seemed headed toward a potential merger before a contentious meeting in the Oval Office ended all momentum in its tracks.

Now, that war is over.

The Saudis are gone, and essential elements have changed. LIV is no longer the type of financial power that could instill fear in its rivals.

LIV Indianapolis, while still not LIV 2.0 by any means, was the first clear sign of that shift. The concerts were canceled. There were dramatically fewer scoreboards and hospitality sections. The Team Championship, won by Rahm's team, was also decided at this event because LIV was forced to cancel a stand-alone event, originally scheduled for next week in Michigan.

It is simply a league trying to survive.

Michael La Sasso, recruited in January off the University of Mississippi roster to be mentored by Mickelson, struggled throughout his first professional season but caught fire in Indianapolis. He held off Rahm, DeChambeau and Sergio Garcia to win his first pro event, rejoicing in the celebratory champagne showers.

As employees posed for pictures and players dashed off to the airport, O'Neil paced far back on the 18th green. He had two white earbuds in, already on the phone and on to what's next.

Whether La Sasso's win is to be a season finale and not the series ender is up to O'Neil.

The Mini Crossword

8/26/2026

BY ADAM AARONSON
EDITED BY JOEL FAGLIANO

ACROSS
1 Only three-letter element
4 Hole food
6 Section at the end of a song
7 Emblem topping a coat of arms
8 Only three-letter zodiac sign

DOWN
1 Visit, as a college
2 Something gathered by a spy
3 Sip slowly
4 Only three-letter Disney dwarf
5 Big name in high-end toilets

ANSWER TO PREVIOUS PUZZLE

	G	E	N	X
F	E	D	E	X
I	N	D	E	X
A	R	I	D	
T	E	E		

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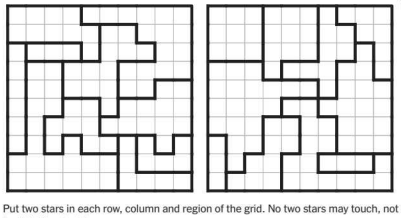
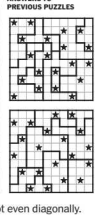
Two Not Touch



ANSWERS TO PREVIOUS PUZZLES



Put two stars in each row, column and region of the grid. No two stars may touch, not even diagonally.

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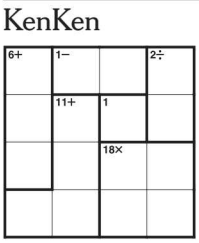
Brain Tickler

Name two major rivers in the world — one American, the other foreign — whose names both start and end with O.

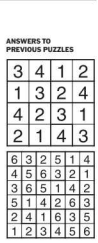
PUZZLE BY WILL SHORTZ

YESTERDAY'S ANSWER Getting a drone caught in a tree wasn't my stupidest move ever, yet it was up there.

KenKen



ANSWERS TO PREVIOUS PUZZLES



Fill the grid with digits so as not to repeat a digit in any row or column, and so that the digits within each heavily outlined box will produce the target number shown, by using addition, subtraction, multiplication or division, as indicated in the box. A 4x4 grid will use the digits 1-4. A 6x6 grid will use 1-6.

For more games: www.nytimes.com/games

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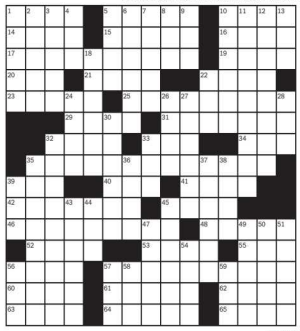
Crossword | Edited by Will Shortz

PUZZLE BY JOHN KUGELMAN AND LANCE ENFINGER



8/26/26

ACROSS
1 Modern lead-in to quit or bait
5 Heat source for many hydrothermal vents
10 Act all teenagery, say
14 [I have something to say …]
15 He has the weight of the world on his shoulders
16 River by the Royal Shakespeare Theatre
17 Enhancing "blemish" (3x)
19 Rip apart
20 Something to belly up to
21 Tennis's "King of Clay," familiarly
22 Cautious
23 "My guess is …"
25 Teach, playfully (3x)
29 Pinocchio's tell
31 South American capital where Simón Bolívar was born
32 ___ Wowie (cocktail with a rhyming name)
33 PC key
34 Wait for it!
35 Sweet popcorn coating (4x)
39 Sci-fi pilot ___ Solo
40 Call, as a poker bet
41 Roman author of "Metamorphoses"
42 Fred Flintstone's boss at the rock quarry
45 Tech review site
46 Nut in Sausalito cookies (3x)
48 Bundles in a stationery shop
52 Pointed remarks
53 "Famous" cookie entrepreneur
55 Church fixture
56 Black mark on a credit report, in brief
57 "Unbelievable!" … or what 17-, 25-, 35- and 46-Across are made from, letter-wise?
60 Never Have I ___ (party game)
61 April's ___ Day
62 Bug on a pug
63 Alien incubators in "Invasion of the Body Snatchers"
64 Acrimonious, as a breakup
65 Units of verse

DOWN
1 Torah scholar
2 Bridge Out ___ (sign)
3 They have teeth but don't bite
4 Ground-dwelling bird in a eucalyptus forest
5 Chichén Itzá builders
6 Taking charge?
7 Happy-sounding advocacy grp.
8 Scuff up, say
9 Set, as a price
10 Instrument associated with beans and salsa?
11 Was a ham
12 Scrunchied hairstyle
13 "The ___" (final track listed on the original "Abbey Road")
18 Audition
22 Word that can precede cry or baby
24 Picky, picky, picky
26 Sch. attended by Steve Martin, James Dean and Jack Black (none of whom stayed to graduate)
27 Housemother
28 What cards with circles, stars, pluses, squares and wavy lines test for, in brief
30 Day break?
32 Got it all off his chest?
33 Disc golf "hole"-in-one
35 Capital city known as the "Jerusalem of the Balkans"
36 Consider
37 Disinclined
38 Small bug with a strong-sounding name
39 "Well, let me think"
43 Herculean tasks
44 Almost a quarter of the Super Bowl's run time
45 Sometimes-uncredited appearances
47 da-DUM, da-DUM, da-DUM, da-DUM, for example
49 Gift from a teacher's pet
50 Free-for-all
51 Result of a hot pursuit?
54 Grand Ole ___
56 One leg press, say
57 Uncle ___
58 Minecraft resource
59 Command to a jumpy dog

ANSWER TO PREVIOUS PUZZLE

N	I	B		A	K	O	N		R	A	J	A	S	
E	V	A		B	O	H	O		S	A	T	U	R	N
P	E	R	S	E	I	D	S		U	T	O	P	I	A
T	R	I	L	L		A	E	O	N		M	I	D	I
U	S	S	R		M	E	N	S	A		T	I	L	
N	O	T		V	E	N	U	S		W	H	E	T	S
E	N	A	M	O	R		M	E	R	C	U	R	Y	
			A	L	L	I	T		T	I	M	E		
		S	P	R	U	C	E	S		P	O	S	T	O	P
C	H	A	S	M		T	I	T	A	N		I	R	L
H	I	C		E	A	R	T	H		R	E	B	A	
A	V	E	S		W	A	W	A		B	E	G	I	N
T	E	C	A	T	E		I	T	S	A	D	A	T	E
U	R	A	N	U	S		T	S	A	R		M	A	T
P	Y	R	E	X		H	O	P	E		E	L	S	

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Culture

VINCENT TULLO FOR THE NEW YORK TIMES

From left, Heath Fogg, Brittany Howard and Zac Cockrell of Alabama Shakes. Below left, Howard performing at Coachella in 2024. Below right, accepting the band's Grammy for best rock performance in 2016. Bottom, in Athens, Ga., in 2012, before their career took off.

After a pause, Alabama Shakes hits play again

Its members were busy with side projects, but one gig led to a tour and an LP

BY JON PARELES

AMY HARRIS/INVISION, VIA ASSOCIATED PRESS

KEVORK DJANSEZIAN/GETTY IMAGES

There was no master plan when Alabama Shakes first got back together. It was to be a surprise, one-time appearance at a benefit gig for a brewery in Tuscaloosa, Ala. But the chemistry felt good onstage and, soon afterward, in the studio. New songs poured out of the band — the songs that fill its new album, "I Must Be Dreaming," which will be out on Friday. It has been more than a decade since the group released its second album, "Sound & Color," in 2015.

"I don't want to call it a comeback," said Brittany Howard, 37, the band's singer, lyricist and lead guitarist, one afternoon in the basement lounge of the Bowery Ballroom in New York.

"It's not like I ever really quit the band," Howard said. "It was just a long break while I explored creativity and the fellows were able to raise their children, which is awesome. We all just went and did things so we could come back and have more to say."

Formed in the small town of Athens, Ala., by high school misfits who turned to music, Alabama Shakes built a sound that was simultaneously rooted and forward-looking, steeped in soul, rock, blues and country but never settling for straightforward revivalism. Howard fronted the band with a commanding stage presence, barbed lead guitar lines and a voice that can be a gentle lilt or a tsunami.

The band's first album, "Boys & Girls" in 2012, climbed into the Top 10 as Alabama Shakes toured ever-larger venues. "Sound & Color" debuted at No. 1 on the Billboard album chart when it was released. It was nominated for album of the year at the Grammys and won four other awards, and the group stayed on the road into 2017.

But Howard was artistically restless. She put Alabama Shakes on hiatus while she made two complex, widely acclaimed, emotionally whipsawing solo albums: "Jaime" (2019) and "What Now" (2024); she also moved to Taos, N.M., before settling in Nashville. She toured extensively on her own, sticking to her solo catalog and backed by a band that included only one member of Alabama Shakes, Zac Cockrell on bass.

Late in 2024, Druid City Brewing Company, a Tuscaloosa brewery and club that had struggled through Covid, asked Howard to perform at a benefit for its live-music series.

The brewery's owner, Bo Hicks, had been an early believer. "I'd heard a lot of bar bands. This was still a little raw, but you could tell that there was so much potential there," Hicks said in a phone interview. Now, he added, "Here's this awesome band that has a mixed-race queer lead singer from Alabama, that extols so many virtues I find dear about the South," he added. "We can go, 'This is ours. This is something we can get behind.' This shows that the odds might be against us, but they can rise up through all the challenges they've had."

The band has remained grateful. "Obviously we didn't make no money then," Howard recalled. "He would put us on a couch, he'd make us some food — he always took care of us."

Howard contacted Cockrell and Alabama Shakes' rhythm guitarist, Heath Fogg; they were in. They had been playing together on and off, including for Fogg's 2020 solo project, Sun on Shade. The fourth member from the 2010s, the drummer Steve Johnson, was out of the band after family and legal problems.

At the Tuscaloosa benefit show, Howard was billed as the headliner. "She did one song by herself — and then the band ran out there," Hicks said. "In that room, the electricity would make your hair stand on end." The band romped through Alabama Shakes tunes they hadn't played live since 2017. "It felt pretty surreal to be back and doing it," Cockrell, 38, said in a video interview from his home in Nashville. "When I sat down to brush up on the songs, I was like, 'Wow, I didn't realize how much I missed this stuff.'"

The successful Tuscaloosa reunion spurred the band to return to full-scale touring beginning in summer 2025. It also decided to book studio sessions in hopes of writing a handful of new songs for the tour.

Howard had never been a fast or prolific songwriter. "If I'm ever reincarnated, I do not want to be a writer ever again," she said. "I want to become a mathematician or something — something stuck and true. One plus one equals two. Something uncreative. Maybe a mechanic."

When a song isn't working, she continued, "It's turmoil. It's absolute terminal dejection, just so miserable," she said. "Every writer knows this. But then it is so fun and it's joyous — not just mentally and emotionally joyous, but physically joyous — to crack a song and to be like, 'I love this. I can't believe I created that feeling.' That's what you are always wanting. A volcano of dopamine."

Howard had toured through most of 2024 after releasing "What Now." She also voiced the title character in the Netflix animated film "Thelma the Unicorn," and she wrote (with Ludwig Goransson) the bluesy song "Pale, Pale Moon" for "Sinners," the Ryan Coogler blockbuster.

They built a sound that was at once rooted and forward-looking.

So she didn't have a large cache of unused material for the reunited band's first recording sessions.

But one week in the studio produced six new songs. "It was pretty low stakes," Cockrell recalled. "We weren't planning on making a record. We were basically just bashing out some ideas and it just started coming together. By the end of that session, it seemed kind of silly to not have a couple more and just finish doing an album."

Cockrell's homemade demos — riffs, grooves, chord progressions — were the catalyst for the band's new songs, Fogg, 42, said in a video interview from his home studio in Madison, Ala. "We were all bringing in demos and ideas, but he just had this really amazing batch of ideas," Fogg said. "A lot of these songs came from that, especially those first six. It just felt like he was really hungry to make a Shakes record, to do something that was his and ours."

For previous albums with the band and on her own, Howard had often provided "a 75 percent fleshed-out idea," she said. "All the parts, where they're going to happen. I was the ship navigator and I knew how to get us where we're going. This time, it was a lot of, like, 'Oh, I don't know what's going to happen next. I'm not sure. Let's find out.'"

She added: "It was amazing to surrender instead of trying to control every little bit, every cymbal, every kick drum. And I welcomed that."

"Sometimes there's a lot of pressure to know where everything's going," she said. "When you do all those details like that, of course it's really fun. But you're missing out on the spontaneity of the moment, the experimentation of the moment, and somebody else's gift that they've brought. And I think in the future, I'd like to leave more room."

As the songs emerged, Howard found herself singing about love, time, tension, resistance and connection: "I can't help but react to the world around me. And in our society right now, in the United States, it's tumultuous and chaotic and confusing."

The album's love songs take unconventional angles. "How Love's Supposed to Go" pledges affection to an unbelieving partner over a choppy beat and churning chords. In "Another Life," which hints at both Motown and triphop, the singer hopes that a failed romance could turn out better the next time around, after reincarnation. And in "Garden," she admonishes someone's neglectful partner, "If you don't show her you love her, I will."

Two songs face current political conditions with inner strength and slow, circling bass lines: "American Dream" moves into a molten, echoey psychedelic limbo as Howard sings about betrayed ideals and bleak prospects: "Low grade fever, lower wage people / How many folks got shot this week?" she sings. In "Tea Time," which Howard said was her favorite song on the album, she seeks "wisdom to turn shields to mirrors / and enemies to lovers."

For much of the album, the tempos are steadfast and unhurried, while the sound is richly and mysteriously layered. Howard rejects the idea that music that speaks to resistance must be "thrashy or showy or aggressive. Why can't it look collected?" she asked. "I was just reacting to the music, but also to the energy around me. It feels a little murky, it feels slow, it feels foggy and uncertain, and I'm just reacting to that."

On Oct. 3, Howard will perform at the Power to the People Festival at the Merriweather Post Pavilion in Columbia, Md., a pre-election protest-music event curated by Tom Morello with Bruce Springsteen, Joan Baez, Public Enemy and many others. For Howard, there is little separation between the personal and the political.

"It's easy to connect the two, because I'm the connection to the two," she said. "I mean, in Tennessee, it is not great for Black women or for gays. I don't get to sit back and hope for the best for everyone else. In this case, myself and my family are the everyone else.

"Some people would be like, 'Oh, you shouldn't have an opinion — you're an entertainer.' But musicians are much more than entertainers. Music makes us believe that we can do something. I feel like music sometimes is the only backbone we've got. Music saves lives."

CHRIS MCKAY/WIREIMAGES, VIA GETTY IMAGES

Dutch Modernist surprise in Midwest woods

ART REVIEW

Gerrit Rietveld designed houses in the Netherlands. And a single one in Ohio.

BY WENDY MOONAN

The Dutch architect Gerrit Rietveld is mostly known for his jaunty 1918 "Red Blue Chair," a sculptural seat whose red-lacquered back and blue seat meet at right angles. It was an experiment to translate flat geometric grids into a three-dimensional, functional object.

"It was made famous almost immediately through photography," says Barry Bergdoll, professor of modern architectural history at Columbia University. He is a curator of a riveting photography show in New York, "Gerrit Rietveld: Wealth of Sobriety" at the Center for Architecture (through Sept. 2). "The chair announced the avant-garde abstract design principles of the de Stijl movement in the Netherlands in the 1920s," Bergdoll said.

Few are aware that Rietveld (1888-1964) designed an estimated 100 houses between 1924 and 1964, 15 of which are documented in the show by its other curator, the Dutch architectural photographer Arjan Bronkhorst. He spent two years taking 400 photos of Rietveld residences for a book of the same title. All are in the Netherlands except for one that is in Ohio, and the great discovery of the show.

The installation mingles modest house exteriors (typically small, geometric, flat-roofed houses painted white with accents in primary colors) with intricate interiors.

PHOTOGRAPHS BY ARJAN BRONKHORST

Top and above, the de Stijl movement architect Gerrit Rietveld's characteristic signatures are seen in this four-bedroom split-level home outside Oberlin, Ohio. Left, the living room at the Slegers House in Velp, the Netherlands, designed by Rietveld in 1955. Below, the exterior of the Rietveld Schröder House, designed by Rietveld and Truus Schröder-Schräder in 1924. Rietveld designed about 100 houses between 1924 and 1964.

Tiny Kronenberg, who hired Rietveld in 1963 to build a house in the Netherlands.

"We took a somewhat radical approach," Bergdoll explained. "The photos are not grouped according to the building they represent but are freely mixed up with one another, to show the richness of life out of a deliberate reduction of things, thus the title the 'Wealth of Sobriety.'"

Some photographs of the interiors include portraits of the owners, many of them descendants of the families who commissioned the houses. They obviously appreciate Rietveld's original schemes, because they have left them amazingly unchanged, especially the built-in elements, a testimony to Rietveld's training as a master carpenter.

"I was looking for Rietveld interiors that were still authentic," Bronkhorst said. "My focus was on design elements, patterns and colors. Rietveld was influenced by light and used color as a design element. Lines and planes dominate his designs. His cabinets look like 3-D Mondrians."

Rietveld was a self-trained architect. He was born into a family of middle-class entrepreneurs. His father ran a furniture workshop in Utrecht that supplied well-to-do families. Rietveld left school at age 11 to join his father's business, training as a carpenter and a contractor.

He was ambitious. At the age of 16 he began taking evening courses in technical drawing, and in 1917 he left to open his own workshop.

In 1919 he joined the de Stijl (Dutch for "The Style") art movement founded in 1917 by the Dutch painters Piet Mondrian and Theo van Doesburg. It promoted pure abstraction through geometry (squares and rectangles, strict vertical and horizontal lines) and a primary color palette.

"Rietveld never saw the house. He was refused entry to the United States in 1956 as an alleged communist sympathizer."

The movement rejected symmetry in pursuit of a "universal harmony." The goal was to remove the personality of the artist in favor of precise harmonies — and, like the Wiener Werkstätte in Vienna, to eliminate the distinction between high art, applied art and architecture.

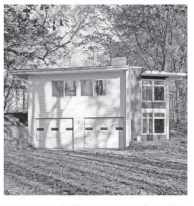
It was also highly political.

"The majority of artists and architects associated with de Stijl were sympathetic to socialism, anarchism or communism," the British art historian Paul Overy wrote in his 1991 book, "De Stijl." "The artists and architects were almost all deeply engaged with new and evolving ideas about the production and consumption of art and design and the relationship of those to modern society and social life."

They had, he writes, "a utopian faith in the transforming qualities of mechanization and new technology."

A de Stijl interior was meant to model a new way of living.

Rietveld's interiors feature built-in bunk beds, desks, couches, cabinets and bookcases. Original furnishings include his "Zig Zag" or "Crate" chairs and geometric, bare-bulb light fixtures. Dashes of color abound: Metal door surrounds are red. Cupboards are blue. Ironing boards are yellow.



Left, the owner of the Ohio house, Jeffrey P. Squire, with his sister Julie. Above, another view of the exterior. The first owner made changes to reduce the cost.

The master's characteristic signatures are also seen in the Rietveld house outside Oberlin, Ohio. It is a white four-bedroom split-level home, with a single floor in front and two floors in back on a steep slope overlooking the Vermilion River.

The owner was Charles Percy Parkhurst, an Oberlin College art history professor who had served with the Monuments Men in Europe in 1945 to retrieve art looted by the Nazis. Parkhurst was interested in modern architecture, and he met Rietveld in 1956 while studying under a Fulbright in Utrecht. He was introduced by his friend Theodore M. Brown, Rietveld's American biographer ("The Work of G. Rietveld, Architect").

Parkhurst commissioned a house from the architect for a large tract of woodland he owned outside Oberlin. Rietveld gave Parkhurst the blueprints to take back to Ohio, and Parkhurst built the house with family, friends and a good mason.

He made a lot of changes to the original plan to reduce the cost: He used wood window frames instead of steel. He gave the flat roof an incline to drain rainwater and snow. He substituted concrete for brick on the fireplace and installed a spiral staircase.

"Rietveld never saw the house," Bronkhorst writes in his book. "He was refused entry to the United States in 1956 as an alleged communist sympathizer."

Parkhurst and his first wife, Elizabeth Huntington Rusling, divorced; she got the house in 1962. In 1966, she sold it to Hugh Brown, an Oberlin College graduate who worked for General Motors. When the company transferred Brown to Detroit, he had difficulty selling the house, so General Motors bought the property. In 1976, the company sold the house and half the property to Warren Squire, a graduate of the Oberlin Conservatory who raised three children there. His son, Jeffrey P. Squire, is the current owner, and he uses it as a weekend house.

"My dad felt he had to make a lot of changes to make the house livable," Squire said. "The kitchen was tiny, so he combined three little rooms to make one big open kitchen. He thought the balcony on the second floor was too small, so he combined it with two bedrooms to make a master suite."

Squire is proud of the house and said in an interview that he is constantly improving it, but he has no intention of restoring it to Rietveld's original blueprints.

"The way it was built was impractical," he said. "I have avoided trying to make it an official anything, because that would limit what I could do to it. This is my bachelor pad, for good or bad." He figures Rietveld would be OK with that.

"Rietveld was championed early in the United States, notably by the curators of the Museum of Modern Art from the 1930s, and then through the passion that Donald Judd had for his furniture," Bergdoll said. "But I never met an architect or architectural historian who knew that there was a house by Rietveld in the U.S. And what a surprise to discover that it is still there, intact if altered over the years."

Family curse

BOOK REVIEW

The Book of Chuck
By LaToya Watkins. *Tiny Reparations Books. 306 pp. $30.*

BY CHARMAINE WILKERSON

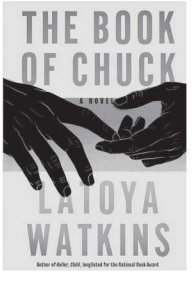
In every generation, those who speak uncomfortable truths are often maligned and ostracized. That stigma is on full display in LaToya Watkins's lyrical new novel, "The Book of Chuck," where a clairvoyant child and then her son years later are abandoned for their ability to see a person's death before it occurs.

It's 1936. Little Nannie is barely a year old when she babbles a premonition foretelling her father's demise. It turns out to be an accurate vision — shortly thereafter, her father is lynched. The events spook Nannie's mother so much that she flees, leaving Nannie to be raised by others. She fears Nannie is "something not of her world; something wicked and unkind."

But Nannie is not the first in her family to experience a chilling vision, and she will not be the last. After her, there's her son, Walter, nicknamed Chuck, who has otherworldly talents. Then Chuck eventually has a child of his own, Baby, who also has these gifts.

Despite its supernatural framing, "The Book of Chuck" is no horror story, unless the horror is the withholding of love. Mostly, this is a slow burn of a tale about family and legacy that casts a wide emotional net, exploring how denials, secrets and repeated rejection can distort a person's identity and development in life.

The book goes back and forth in time, from 1930s Texas to the 2000s, following multiple generations of an African American family grappling with the burdens and effects of their abilities while also confronting personal, economic and race-related challenges. Watkins, whose story collection, "Holler, Child," was longlisted for the National Book Award, makes the novel shine with her ear for language and her memorable imagery.



One big question the novel asks is: If you see the world for what it is, can you change it, or do you change yourself? Chuck hides from his abilities, even as they wreak havoc in his life. Baby, however, does not deny her powers — she merely conceals them from others, secretly hoping to use them to alter the events she foresees.

Overall, "The Book of Chuck" feels like a poetic allegory for both generational trauma and generational healing. This is most evident in Chuck's story line. Shortly after giving birth to him, Nannie abandons Chuck, leaving him in the care of distant relatives. Those guardians also reject him. The only compassionate parental figure Chuck has ever known is Daddy, the former husband of one of his caretakers. Daddy, unlike everyone else, treats Chuck as someone who deserves love, kindness and forgiveness.

"You a good boy," Daddy tells Chuck after Chuck returns home from a stint in prison. "Always been a good boy. We all lose our way in the muck sometimes." It is a life-changing declaration, made quietly over a plate of fried catfish and sweet potatoes. "It made me want to do whatever I needed to do to prove myself worthy of what he'd always given so freely," Chuck recalls.

Throughout the story, characters display a desperate need for a sense of belonging, sometimes to their great detriment. Chuck, for instance, turns out to be a tenderhearted husband and father himself, but grave missteps in his marriage to Lettie have lifelong consequences.

Ultimately, we spend much of the novel watching these characters learn to live with their visions without negating themselves. The narrative calls to mind a core idea of Toni Morrison's "Beloved," in which the author uses supernatural elements to explore a fundamentally human challenge: We may yearn for the acceptance of others while neglecting to spare enough respect for ourselves.

The story of Chuck's troubled family suggests there is room for that self-regard to blossom.

Charmaine Wilkerson is the author of "Black Cake" and "Good Dirt."

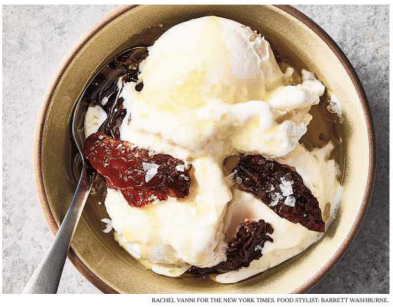
LIVING

Simple tips to level up summer favorites

BY ALI SLAGLE

It's practically impossible to turn up your nose at boiled sweet corn, juicy tomato slices and salted, grilled chicken slathered in barbecue sauce. These are all pure fleeting pleasures to soak up fully while they're here.

To squeeze even more joy from these summertime treats, consider these small, simple switch-ups — unexpected pairings or preparations that can recapture some of that initial giddiness. Here are 11 suggestions to make every bite feel like the first all summer long.



RACHEL VANNI FOR THE NEW YORK TIMES. FOOD STYLIST: BARRETT WASHBURNE.

ICE CREAM

Drizzle olive oil

A thin drizzle of olive oil (the more flavorful, the better) on a few scoops adds a sheen and silkiness — a little luxury. While vanilla is a natural choice, olive oil is also delicious on coffee, hazelnut or strawberry ice cream or gelato. Crunchy flaky salt isn't a bad idea, either.

CHRISTOPHER TESTANI FOR THE NEW YORK TIMES. FOOD STYLIST: SIMON ANDREWS.

HOT DOGS

Grill parallel to the grates

The default is to arrange hot dogs perpendicular to the grates, yielding stubby grill marks that carry less flavor (browning is flavor!) and leave much of the dog pale — not to mention letting them roll around. Avoid those problems by rotating the dogs 90 degrees and arranging them parallel to the grates. The grates make long grill marks down the whole length of the dog and act like a sling to keep it in place. Rotate every so often until the whole thing is sizzled crisp. (The same logic applies to grilled corn.)

RACHEL VANNI FOR THE NEW YORK TIMES. FOOD STYLIST: SPENCER RICHARDS.

STRAWBERRIES

Sprinkle with black pepper

Corn with rosemary, peaches with fish sauce, watermelon with feta and now strawberries with black pepper. You may have caught onto a central theme to making the most of the season: Push sweet produce savory.

A few grinds of black pepper can electrify sliced strawberries without overwhelming them. The hit of spice is not unlike adding Tajín to mango: the fruit's sweetness comes alive. It jumps and bounces.

RACHEL VANNI FOR THE NEW YORK TIMES. FOOD STYLIST: BARRETT WASHBURNE.

BARBECUE SAUCE

Use it for salad dressing

Barbecue sauce's smoke, spice and sweetness can take a leaf from simple to deeply satisfying. Thin and brighten any barbecue sauce with lime juice, and then use it to dress a salad of sturdy and crunchy greens like kale and romaine, grilled vegetables, roasted potatoes, beans and more. If your sauce is particularly vinegary, use less lime juice; if it's particularly sweet or thick, adjust with more.

DAVID MALOSH FOR THE NEW YORK TIMES. FOOD STYLIST: SIMON ANDREWS. PROP STYLIST: PAIGE HICKS.

ZUCCHINI

Cook it way past done

Zucchini isn't fussy. It can be sliced, diced, grated, seasoned boldly, eaten raw — it's easy. A prime example of its laid-back nature is how you can (and should) overcook it. With high heat and copious olive oil, on the stovetop or in the oven, zucchini will release its flavorless water, sizzle and caramelize. Not only can it take the heat, zucchini also improves because of it, growing sweet and silky.

ARMANDO RAFAEL FOR THE NEW YORK TIMES. FOOD STYLIST: REBECCA JURKEVICH.

WATERMELON

Pair it with whipped feta

Any longstanding relationship benefits from switching up routine. In the case of the Mediterranean pairing of watermelon and feta, that could mean whipping the feta with yogurt in a blender or food processor until it resembles whipped cream. Swoosh the fluffy mixture on a platter, and then arrange watermelon chunks on top. The partnership of sweet melon and salty cheese is still solid, just now in a silkier, visually striking form.

ARMANDO RAFAEL FOR THE NEW YORK TIMES. FOOD STYLIST: CYD RAFTUS McDOWELL.

GRILLED CHICKEN

Coat with mayonnaise

You won't taste it, but a coating of mayonnaise, instead of oil, on chicken before it hits the grill will do wonders, giving it a golden crust, keeping it from sticking and insulating it from burning. Consider pairing with a flavorful sauce, like Dijon mustard, or herbs and spices, like ginger. Mayonnaise can also help other ingredients that are prone to sticking, overcooking or burning on the grill, such as salmon, shrimp, turkey burgers and bread.*

ARMANDO RAFAEL FOR THE NEW YORK TIMES. FOOD STYLIST: SIMON ANDREWS.

PEACHES

Add fish sauce

If an ingredient's sweetness is cranked to eight, nine or 10, the same can be done to its savory side. Peaches are assertively sweet, and fish sauce is assertively savory. Eat them together by dressing the cut fruit in a fish sauce dressing, and then enjoy the ride. (It's also fun with watermelon and mangoes.)

ANDREW PURCELL FOR THE NEW YORK TIMES. FOOD STYLIST: CARRIE PURCELL.

TOMATO

Add tinned fish

A tomato salad and a piece of grilled fish: Now that's warm-weather eating. But tinned fish brings something else to the equation. Not only is it a pantry staple, ready to bulk up tomatoes, but its concentrated flavor is also a more forceful foil to the sweet tomatoes. Because tinned sardines, tuna, anchovies and other fishes are preserved, they have a more salty, briny, rich quality that fresh fish just can't deliver.

DANE TASHIMA FOR THE NEW YORK TIMES. FOOD STYLIST: BARRETT WASHBURNE.

CORN

Add rosemary

You already know that corn goes well with bright, fresh ingredients like cilantro, basil, tomatoes or lime, but woodsy, earthy seasonings, like rosemary, can bring out corn's warmth and nuttiness. It takes only a small quantity: Slather corn on the cob with rosemary butter, or add a sprig or two to cooking kernels.

ALI SLAGLE

S'MORES

Turn them into lemon meringue pie

Sometimes I set aside the bittersweet accompaniments to a typical s'more and pick up the citrusy, creamy components to a lemon meringue pie. This s'more starts with a Ritz cracker; its butteriness is reminiscent of pie crust. Spread the cracker with a little lemon curd, and then sprinkle it with flaky salt. Because lemon curd and marshmallows are both quite sweet, the salt helps keep the combination from cloying. Add your toasted marshmallow (don't be shy on toasting it to well-done), and then smush it all together with another cracker. It's a two-bite, fireside lemon meringue pie.

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